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ABSTRACT

This publication provides a systematic and comprehensive overview of major developments within and across the Organisation for Economic Co-Operation and Development countries in strategic approaches to curriculum planning and the principles governing the organization of learning in schools. The report concludes the initial phase of the Centre for Education Research and Innovation Project on Curriculum Reform and School Effectiveness. The study comprised national returns from a structured questionnaire, expert colloquia, and a selected literature review. The first three of eight chapters within this book address context, changes in administrative relationships and control, and general curriculum issues and pedagogic developments in the compulsory years of schooling. In chapter 4, the emphasis moves toward what are virtually universal concerns, namely the structure, content, and organization of the core curriculum. Chapters 5 and 6 focus on developments in curriculum and pedagogy that are characteristic of either the primary or the secondary stage of schooling, including those that are transitional between the two. Chapter 7 examines the process of curriculum development and pedagogic reform and the potential dichotomy between professional freedom and tightly drawn evaluation and assessment procedures. The appendixes provide a framework for the preparation of reports on curriculum reform in OECD countries (including questions), as well as a list of responding reports giving country, title, and author. (52 references) (KM)

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An Overview of Trends

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CURRICULUM REFORM

An Overview of Trends

by
Malcolm Skilbeck

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Pursuant to article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

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The main objectives of the Centre are as follows:

- *to promote and support the development of research activities in education and undertake such research activities where appropriate;*
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This report was prepared to conclude the initial phase of the CERI Project on Curriculum Reform and School Effectiveness. It represents a first attempt to come to terms with the influences, assumptions and aspirations which underlie the curriculum in OECD countries. As such, it provides a survey of prevailing trends and issues, rather than a fine-meshed, country by country account.

Against the sociopolitical background of Member countries, set in an historical context, the report explores changes in educational organisation and administration at a number of different levels, and considers the impact of such changes on the nature of schooling. It also considers evolving professional opinion with respect to pedagogy, and priorities for curriculum development.

A number of key areas emerge which will be investigated in future CERI work. These will focus on: the teaching of thinking and reasoning as fundamental basic skills; new developments in mathematics, science and technology; issues relating to the humanities and values; the core curriculum; and finally, assessment, evaluation and learning.

The material on which this report is based derives from information submitted by Member countries, enriched by references to the research literature. Seventeen countries replied to a questionnaire which appears as Annex 1 to this report. The preparation of responses in the form of individual country reports often proved a complex and painstaking task, indicating the seriousness with which countries are engaged in redefining educational principles and practices. The Member countries contributing reports are also indicated in Annex 2, together, where appropriate, with reference to authorship.

The report has been prepared by Professor Malcolm Skilbeck, Vice-Chancellor, Deakin University, Australia, assisted by David Thomas and Peter Davies of the CERI Secretariat. It is published on the responsibility of the Secretary-General of the OECD. The views expressed therein do not necessarily represent those either of OECD or of its Member governments.

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INTRODUCTION AND OVERVIEW

This report is the final outcome of a state-of-the-art study of trends and issues in curriculum which was initiated in 1987 by the Secretariat with the approval of the Governing Board of the Centre for Educational Research and Innovation (CERI). This study comprised national returns from a structured questionnaire, expert colloquia and a selected literature review. Drafts of the report were circulated to Member countries for comment and debated in the Governing Board of CERI. The data that have been amassed are, inevitably, far from complete and need to be supplemented by other sources of information, including current work on educational indicators, the OECD's annual statistical returns on education, and reports of related OECD projects in education.

Nevertheless, the report provides a systematic and comprehensive overview of what are, by general consent, major developments within and across Member countries in strategic approaches to curriculum planning and the principles governing the organisation of learning in schools. Its purpose will have been served if it succeeds both in conveying a coherent account of these trends and in stimulating the analysis of those unresolved issues and tensions which have been the concomitants of the rapid and pervasive educational change that all countries have experienced in recent decades.

Résumé

Political as well as professional decisions which affect education constitute a complex pattern across Member countries. They are a central element in the context of action at the school level. During the past decade or so, that context has often been dominated by economic and social concerns as countries wrestle with such issues as structural adjustment, changing employment scenarios, new ethnic patterns in the population and the transformation of prescriptive value systems into the relativistic and elective styles that characterise the industrial democracies.

It is primarily through the lens of such contextual shifts that the general trends in curriculum and learning are viewed in this report. There are other ways of viewing them – such is the inference that must be drawn from the very relativism that is a marked feature of our societies. Yet it is striking how much convergence there is across countries in the preoccupations of policy-makers and opinion leaders in education, whether they be representatives of governments, professional associations, the academic community or community groups. The answers may not be the same, but the analysis follows familiar lines. Thus, there is a widespread concern for the overall quality of learning in classrooms and the acquisition of basic skills; parents are enjoined and affirm the right to be directly involved in the schooling of their children; assessment of pupil performance is on everyone's lips; the

curriculum is to become more vocational in tone and direction; learning skills are emphasized over subject content and multiskilling is a key word for life preparation; and the need for improving the accountability of the education service is reiterated.

Recurring themes in the report are the interaction among economic, industrial, technological and political forces working on the curriculum, community and special interest group concerns, and the roles professionals in curriculum and teaching assume or wish to claim. The language and tone of many of the analyses and discussions of education embody these different forces and frequently reflect the manifest concerns of industrialised countries in the throes of the second – or is it the third? – industrial revolution. This should come as no surprise. Education is not a sphere apart, but is subject to social and cultural osmosis. Many of the more specialised themes in educational debates such as the nature of intellectual culture, the forms of moral and mental development in children, or the art and science of teaching, are deeply coloured by the consciousness that education and national survival are intertwined. In this respect, is there not a convergence between the styles of educational planning and decision-making in the developed and developing countries of the world? The latter have long been familiar with the theme of education for national development – or survival. Human "capital" is an asset of concern to all countries[1].

In a report where trends and issues common to several countries are addressed, or where significant developments in one country are set as distinctive figures against more common ground in other countries, foreshortening and abridgements are inevitable. Where, too, the target is a moving one, it is all too easy to lose sight of it, or to mistake a glistening but ephemeral foreground for a more enduring if not always so visible backdrop. The report aims to be topical and its conclusions are more a pointer towards further enquiry and a source of insight than a filter through which all the items addressed must pass; it is for generalists, reflecting the consistency of the data across countries, and specific developments in individual countries. The choice of the latter is not arbitrary but arises from what countries themselves have signalled as major innovations which they are interested to map out and have others respond to.

So much for the first three chapters of the report, which address content, changes in administrative relationships and control, and general curriculum issues and pedagogic developments in the compulsory years of schooling.

In Chapter 4, the emphasis moves towards what are virtually universal concerns, namely the structure, content and organisation of the core curriculum. These dimensions will be considered in greater depth and detail in one of the later studies in this overall programme of work in CERI. For the present, attention is focused on stability and change – those countries with long-established core programmes which are undergoing adjustments and are introducing (or more often reintroducing) nationwide or statewide core curricula after periods of more localised decision-making. Important legislative changes are occurring and it is only with the passage of time that the effects of legislation, particularly with respect to the relationship between central or ministerial control and school decision-making, will be fully understood. Moreover, one of the most important of all issues facing policy-makers is the means by which both national and central impulses in determining the core may be reconciled with the variety of sectional and local – including school level – interest groups that wish to shape the overall curriculum context or its classroom delivery.

In Chapters 5 and 6 the focus is directed by a stage analysis: developments in curriculum and pedagogy that are characteristic of either the primary or the secondary stage of schooling, not forgetting those which are transitional between the two. It is suggested that, notwithstanding the growing emphasis in many countries, in secondary education, upon an instrumental vocationalising of the curriculum, at the primary stage some of the most

interesting innovations are either grounded in theories about multifaceted human development or represent a reaction against imposed structures and the manipulating of children's creative energies according to social dictates.

Although the historically-grounded sharp separation of the cultures of elementary and secondary schooling is no longer valid – grounded as it was in the class-based thesis of parallel streams and quite unequal life chances – there remain highly significant differences between these two stages of schooling. These reflect not only developmental differences among age groups, but also the still commonly separate forms of teacher recruitment and preparation and the assumptions and expectations of the community about the purpose of schooling at different stages. In this study, these differences are seen to be a mixture of psychological and societal factors: the models of human development that are drawn upon particularly in discussing elementary education and the vocational or prevocational orientation towards working and adult life that are so prominent now in secondary education policy-making.

A penultimate chapter deals with the processes by which curriculum development and pedagogic reform are being energised. An issue which has been pervasive in the whole report is the potential, if not actual, dichotomy between professional freedom, including enhanced professional roles in the development process and the tendency at the national or state level towards specific guidelines, and tightly drawn evaluation and assessment procedures. Policy-makers and administrators are inclined to regard the dichotomy as unreal or exaggerated, whereas teachers, academics, parents and community groups are apt to see these protestations as a mask for more subtle forms of system dominance. Thus, these groups seek improved support services and professional development programmes – which are costly – whereas the governments and their representatives often seek greater efficiency seeing guidelines not as an imposition, but as a necessary (and economical) framework for local decision-making.

The report ends with a brief set of conclusions presented in the form of pervasive themes and issues which might be seen as an agenda for the analyses and enquiries which must inform the continuing policy debates. Much of the work is highly specific to individual Member countries; some is appropriately carried out through the auspices of the OECD. The overall work programme of which this state-of-the-art report forms a part is continuing, through a series of studies focused on particular areas of the curriculum (e.g., science and mathematics) or in curriculum themes (for example thinking skills, core curriculum). Reports of these studies will complement and extend the present work providing the kind of depth and detail necessary for the fuller pictures and focusing more closely on issues of pedagogical practice.

Chapter 1

NEW DIRECTIONS, OLD WAYS

"Bit by bit, schools are improving, but the biggest error is the assumption that all schools are alike and share the same problems."[2]

The Nature, Scale and Adequacy of Developments in Curriculum and Pedagogy

There is a new vitality and sense of changed times in the schools and school systems of the OECD countries. Educators, parents, administrators, politicians and community groups are increasingly recognising that there are new roles and responsibilities for schools over and above those that have become customary. It is not that novelty for its own sake is sought; nor is there a rejection of the past in the manner of the upheavals of the late 1960s[3]. Across a wide spectrum of political and social philosophies, there are calls for schooling positively to accept rather than resist or ignore the challenge of the dynamic economic, environmental and cultural forces that continue to press on our societies. It is this theme of schooling in a responsive, flexible and socially creative mode that orients this study.

Evidence from several Member countries points to a continuing community uncertainty about the goals and purposes education is to serve. Our societies are not free of major problems and challenges, whether in the economic or socio-cultural spheres. Changes in our way of life and in society at large lead many to conclude that the role of education is to consolidate and to concentrate curricula, teaching and learning in quite definite ways. These ways might be the old ones – known and established; or they might involve striking out in new directions. In either case there should be a very definite sense of purpose and a determination to use education as itself a means of shaping society to new ends, to rise to the perceived challenges. In the words of Jean-Pierre Chevènement, former Minister of Education in France, "*L'éducation nationale doit être le fer de lance de la modernisation*".[4]

In all countries, beneath the incessant surface movements, there seem to be deeper undercurrents. The fundamental character of the educational process, its institutions and the teacher-student relations it sustains are certainly evolving. But they do so at a pace which is far steadier and more uniform than might be inferred from the incessant international dialogue of educational policy and theory. We must not confuse the sometimes fervid declamations in the public arena with the quieter and more orderly transformations that are occurring in the schools.

It is indeed timely to review trends and issues in curriculum reform and pedagogy in OECD Member countries. Reform of education is once more being projected as a major – even in some instances the major – instrument of economic and social progress. What is

being accomplished and which directions of educational development are being followed by policy-makers? This is the first and principal theme of the report. Many studies and enquiries would be required to give comprehensive answers to such questions. The present enquiry aims to contribute at the level of trends in national systems of schooling, both elementary and secondary, and this provides part of the answer.

The findings presented here, as they relate to curricular and pedagogical movements in recent decades, demonstrate that the educational community has never – *pace* some of the more vocal critics – stood still while the world about has undergone dramatic change. Only the most superficial, not to say prejudiced, commentators can entertain such notions. They need to be laid to rest. On the other hand, it is a legitimate question as to whether the measures of educational adaptation and reform are of the right kind or as pervasive as they need to be given the scale of the problems that many education systems are now confronting. It is this question or cluster of questions that provides the second main focus of the report: the appropriateness, as well as the nature and scale, of recent developments in curriculum and pedagogy in Member countries.

A Cycle of Change

During the 1960s and early 1970s, many OECD countries introduced into their schools wide-ranging innovations in the content and methods of teaching. They did so as part of a massive expansion of education systems in a period of remarkable growth and change in the industrialised societies. Learning processes came to the fore to meet the needs of the greatly increased student numbers drawn from all sectors of the community. Curricula were reviewed and revitalised and whole new subjects or fresh approaches to existing subjects were introduced to meet emerging social needs: in working life, in the leisure society and in interpersonal relations and the values domain. The words of the educational historian, W. F. Connell, are apposite: "In all probability, there has never been as swift a transformation of school subject matter as occurred in the 1960s"[5].

Connell identified three characteristics of the curricula and pedagogical reforms which teachers of the period tried persistently to put into practice: *i)* encouragement to students to discover facts and think for themselves, to define problems and issues and work for solutions; *ii)* variety and diversity of approaches, combining individual assignments, group projects and other pedagogical procedures designed to engage students' interests; *iii)* the fostering of active student expression and creativity. In the 1980s these themes have been given more of a social needs emphasis, as a result of growing consciousness of economic challenges and large-scale social problems. Nevertheless, they continue to inform progressive classroom practice in all countries.

The prolonged post-war period of development and growth was followed in the mid-to-late 1970s by a consolidation and in some cases there ensued something of a reaction to the scale and pace of the changes that had gone before. It is not the purpose of this study to examine the reasons for this shift but it is clear that, in several countries, political and economic considerations were major factors. Many of the changes schools were adopting did not bring about immediate or obvious improvements in learning (it was unreasonable to expect they would) and governments had other agenda to address, such as growing unemployment among youth and technological change.

In the 1980s, countries once more began to address in quite intensive ways the intimate but often complex relations between the outcomes of schooling and the quality of life in

society. In several countries, the ability to achieve such broad policy objectives as structural change in the economy and the utilisation of new technologies, improved living standards, the provision of a high standard of social services, expanding employment opportunities and an enriched culture was seen to be contingent, in no small measure, on an overall quality of educational provision and a definition of objectives and priorities which, if they were to be achieved, required a renewed commitment to educational reform. In other countries, while reform was not eschewed, it was widely believed by policy-makers and administrators, as by parents and teachers, that the challenge of socio-economic change to education could best be met by a concentration on curriculum frameworks, learning materials and teaching procedures that had already proven their utility in the practical setting of the school. Hence a shift of interest towards the school as the focal point of change[6].

Whether the theme is innovation or consolidation, throughout the 1980s education has been publicly scrutinised and evaluated. The criteria that are deployed increasingly reflect prevailing community preoccupations and concerns, particularly concerns about student behaviour and values, attainment standards, job opportunities and the cost of making reasonable educational provision for all entitled to it. Such concerns, in turn, are often fuelled by measures of school performance. These highlight problems in the school environment. Indicators of economic conditions at times have cast a shadow of doubt on countries' ability to sustain the steady and balanced growth which has been a universal goal of the OECD since its inception. It is against this background of introspection, combining a cautious optimism with a healthy self-criticism, that this study of curriculum and pedagogical trends has been undertaken. New directions there certainly are, but old ways are still being traversed as well.

Chapter 2

A CHANGING SOCIAL AND EDUCATIONAL CONTEXT

The curriculum and its attendant pedagogy are the principal means whereby the school pursues its educational purposes and organises and structures learning. The curriculum is everywhere changing, however imperceptibly. But by what means can we characterise change? How can we relate it to the broader social and educational context?

Language and Experience of Change

Metaphors for educational and other dimensions of social reform abound. In 1971, while Western European countries were still experiencing the frisson of politically radicalised youth and workers, new social and educational visions were in the air. Queen Elizabeth of England communicated her belief to the then Prime Minister, Mr. Edward Heath, that the social order was about to collapse. Heath shrewdly replied that in his view all was well since the pendulum, having moved so far, was about to swing back towards stability. Not much later, the oil crisis gave rise to a further swing or perhaps, for a time, a spin. But the fires of 1968 were already cooling and the crisis of oil helped to turn education back on itself.

The swinging pendulum is an image of social and indeed educational change. A related image, more akin to a gyration, is that of the roundabout: the reforms in education today might be likened to those of 20 or 30 years ago inasmuch as education as a means of nation building or rebuilding is once again high on the agenda. Yet again, there is the metaphor of the linear accelerator: the reform gathers momentum and when maximum acceleration is reached fundamental changes occur.

Whilst pendulums, swings and roundabouts are much in favour in studies of change, the accelerator is, or so it appears in the eyes of the typical researcher concerned with change processes in education, rather less apposite. It is affirmed in the literature that educational reforms in fact often stop short of the point where fundamental changes occur: situations are partially transformed and reforms are described as patchy, partial or incomplete[7]. Thus, in the United States in the 1960s the transformation of high school mathematics and science was a ragged affair; in Britain the Plowden Committee's recommended reform of primary education proved to be more a commentary on what had been partially achieved in individual local education authorities and schools than a firm direction for future development. In Ireland, there has been disappointment over the limited take-up in schools of the far-sighted reform proposals for primary schooling dating from 1971; in the

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Federal Republic of Germany, comprehensive schooling quickly became a political issue and selective secondary schooling is the dominant mode[8].

In more recent days, the introduction of microcomputers illustrates another issue: the revolutionary potential for transforming pedagogy is mediated through teacher values, skills and attitudes, resource constraints, and the technical imbalance between hardware and software. Seldom are countries able or indeed willing to work comprehensively and consistently on all of these fronts, thus progress is uneven.

It must also be conceded that some reforms in schooling can be retrogressive or at least have unwelcome unintended consequences, such as the lowering of standards of student attainment or excessive costs for minimum gains. Educational technology has provided examples of the latter, including the early experiments with language laboratories and computer-assisted learning. In addition to the metaphors signifying movement, energy, dynamism, there is also the educational dead end. "Reform" and "progress" are not always the same. This lesson has been well learnt by educators during the past three decades.

But perhaps the most universal of these change metaphors is suggested by the shunting locomotive. At least to people in schools the change process is often experienced as a series of sharp shocks as one determined loco after another moves them across endless tracks. The rationality of the yard supervisor and loco driver (who in any case keep changing) is not always apparent to the impacted wagons[9].

A Backward Glance

What is clear is that since the 1950s many Member countries have experienced a succession of significant impulses in educational reform, which have varied widely in range and intensity. They have occurred in school reorganisation and development, new approaches to curriculum scope and content, innovatory practices in teaching and learning and the expansion and enlargement of teacher education. It is useful in attempting to assess the significance of current movements to set them against this backcloth of a generation or more of continuing changes in curriculum and pedagogy in many Member countries.

The early post-war initiatives, for example in the United States in the 1950s, either took the overall curriculum and school organisation very largely for granted or sought adaptations and adjustments to meet perceived student characteristics. There was a strong emphasis on pedagogy: ways of improving learning and organising classrooms for instruction. "Life adjustment" education is a case in point, reflecting a changing high school population and a felt need to modify teaching content and methods. In the words of one commentator: "The school reform debate in the 1950s was neither cognitive nor curricular. It was organizational and instructional."[10]. Educators of particular stamp were in the saddle in a period of rapid expansion of the school system. Their critics were not, however, content to leave them there. The heated debates of the 1950s were followed by an era of very largely subject-specific projects which, again, took the overall shape of the curriculum for granted and aimed to update content and introduce new, psychologically-oriented learning strategies. A new breed of educators replaced the old and "curriculum development" became an international slogan.

The subject-specific projects of the 1960s, starting with mathematics and physical sciences, are often treated as the beginning of the modern movement of curriculum reform. This is certainly to oversimplify, yet it is the case that the changes in teaching content in such subjects as mathematics and sciences gave impetus to subject-centred curricula and a

new vigour in pedagogy around the world. Fresh life was also given to the essentialist philosophy of education: universal core subjects, enduring and rigorous standards, authoritative knowledge and resurgence of interest in cognitive or process skills across the curriculum. Such was the aspiration. The school practice did not, however, change on the scale or in quite the ways that had been hoped.

It is significant that the drive for reform in the United States in the Sputnik era was as much political-economic-administrative as educational: the nation was perceived to be at risk then, as in the 1980s. Apart from the limitations of the projects as change strategies, they did not capture the national imagination or command the political agenda in the way that the reforms of the 1980s have done.

In some countries, such as Australia, Japan, Sweden, Scotland, England and Wales, reform programmes and experiments from the 1950s onwards related to the reorganisation of secondary education along comprehensive lines, centred on the structure of schooling and expansion of provision. In the 1960s and 1970s we observe similar trends in France, Finland, Turkey and Italy (but not, on the whole, Germany, where the tripartite system of *Hauptschule*, *Realschule* and *Gymnasium* seems firmly rooted in the enduring Humboldtian tradition). Much of the impetus was provided by concerns other than international trends in politics and economics. These include social justice, equality of opportunity and national efficiency. Thus we have the spectacle of the national State bent on reforming itself but, quite willing, as was the case of Sweden for example, to learn from the American experiment in democratic schooling[11].

Education for all in a comprehensive setting was clearly related to the advancement of the nation as well as meeting the needs of the individual. School reform was seen as a concomitant if not a cause of social progress. These changes, however, were not usually accompanied by significant widespread changes in the nature and the delivery of the processes of teaching and learning except insofar as subject content was updated and small-scale pedagogical reforms occurred. A commentary by the Inspectorate in England and Wales makes the point that all too often what occurred was that the old curricula for selective schools were somewhat modified and inserted into the new institutions[12]. Similarly, the Finnish authorities note that changes in school practice did not, in the 1970s, match the reorganisation of 1972. Content and methods are the focus of reform there in the 1980s. At the elementary stage there was in several countries a release from the restrictions of selection for particular types of secondary schools with a consequent freeing of the curriculum and pedagogy. This, in turn, provoked a "back to basics" reaction which has persisted to the present.

Policy Concerns

It is not possible here, nor is it necessary, to outline the succession of reform endeavours in school development and learning or to go further into the forms and processes of change from the 1950s to the 1970s, in order to address the first of our major concerns: the current debate and the context in which it is occurring. Crucial to understanding that debate, however, is awareness that practically all of the major public education policy issues now under review are part of broad and complex socio-cultural movements which are being increasingly related to economic, political and strategic concerns in Member countries. These concerns are of a diverse, indeed amorphous nature. Matters commonly raised in OECD and other reports cover birth rate decline (except in Ireland and lately in Sweden);

changing family structures, high divorce rates, ageing societies; unemployment; the participation of women in the workforce; migration and multiculturalism; structural change in the economy; the impact of technological change; environmental degradation; law and order; information processing and the media-directed society.

The trends and concerns identified in the previous paragraph might seem to set the agenda. To many politicians and commentators they do. Yet there is more to it than that. From even a brief listing of such a wide range of concerns and trends, it is evident that the challenges to education require considerable analysis and refinement. There is not obvious transfer from "social issue" to "educational action" and this itself constitutes a problem for the commentators and the politicians who are calling for action as much as it does for the educators.

More than any other factor, it is the sense of a vast array of issues to be addressed through a huge number of institutions – schools – that is resulting in a two-way power shift: concentration of policy and dispersion of responsibility for action. The trend towards concentration of educational control is a striking development, alongside devolution of responsibility. Accountability is the connecting mechanism which is increasingly seen as the means of linking these two ships that might otherwise pass in the night. But there is more to it than this metaphor suggests.

The concentration of control is not necessarily into single national ministries or centres but into functional agencies which, enlisting modern communications technology, are able to aspire to if not always maintain close, system-wide control or surveillance of the field of action. Such concentration should not be seen in terms of the conventional distinction between centralised and decentralised patterns of educational organisation. It is in effect a redistribution of functions and authority in which both central agencies and the field play new roles. There is, moreover, a distinction to be drawn between central control of broad policy, resources and curricula on the one hand, and autonomy in pedagogical practice on the other.

Noteworthy in this context is the increased trend towards community political-bureaucratic control of major educational decisions and consequent uncertainty and ambiguity in the role of the specialist professional educator. The trend, by the way, does not preclude occasional coalitions on specific issues. It follows that the renewed interest in the learning process, teaching methods, the selection of content, school environment and their interrelationships can only be partially understood if we focus on the internal dynamics of the education sector. What must be recognised, above every other consideration, is the public profile of education: its prominence in the public consciousness; hence its political salience. Public education is public business; educational decisions and the uses of educational resources are a matter of public concern. This manifests itself, of course, in the very considerable media attention and in the widely publicised debates and controversies in several – but not all – countries.

What is the source of these concerns? Is it some objective demonstration of the shortcomings of schooling or of the ways in which particular pedagogical practices (such as highly-directed instruction, or frequent testing of learning outcomes) can foster substan9tial improvements or changes? The answer to these questions is that an impartial appraisal of educational practices and the research literature does not justify either the extreme criticism in some countries, or the excessively optimistic expectation of an earlier generation of reformers. The view of these reformers, that widely-dispersed curriculum and pedagogical changes hold the key to dramatic short-term gains in learning and in life chances, has been widely challenged. But nor can the converse be claimed, that the control and assessment movements will significantly improve learning outcomes.

Whilst attending directly to the need to attain high standards, relevant learning and other desiderata in mass education systems, we must keep in mind changes in the wider social, economic, political and cultural arenas. These changes, as much as what has or has not been done in schools, help to explain what has become, especially within English-speaking countries, a chronic disquiet about the public education system. This disquiet manifests itself in concern about basic skills, academic standards, the ability or willingness of schools to prepare for employment, the expectation that the school will educate for improved public morality and standards of behaviour and the belief that it is to schooling – or education more broadly – that we must look for economic/social development. Generally speaking, the Anglo-Saxon countries are moving towards the kinds of national frameworks for curriculum (and other) decisions commonly found in Continental Europe and Japan. There is, in some countries, and particularly in this context the United States, the United Kingdom and Australia, a trend to deflect upon the school the economic and social problems of the day. While this manifests itself in criticisms that are often wide of the mark where they are not quite superficial, the obverse of those criticisms is the expectation that improved education is vital for national well-being. Something of an impasse has occurred and countries need a way through it.

There has been, especially since the late 1970s, a considerably heightened expectation of the social and economic benefits to be derived from qualitative improvements in schooling: in curriculum and in learning outcomes. While the 1960s and 1970s themes of democratisation, access and equity have not disappeared, they are now milder, more sporadic. They have been overtaken by the economic and technological imperatives. The note of "efficiency" sounds more frequently than "equity".

In the case of one country, Australia, in a 1987 OECD review the role of the school in economic recovery was highlighted. Subsequently, the Australian Minister for Employment, Education and Training, in chairing the 1988 OECD Intergovernmental Conference on Education and the Economy in a Changing Society and presenting the Australian position, made it perfectly clear that schooling must perform an instrumental role of adjustment to economic and other kinds of macro-social changes. He did not confine himself to economic and technological factors and noted the need to recognise that there are individual as well as social interests that must be served and that the social sciences and humanities have a vital role in "the process of adjustment". Other OECD projects have taken a broader approach still. But adjustment is not simply one way. The OECD programme of conferences and the report on *Schools and Quality* (published in 1989) amply demonstrate that there is a broad spectrum of political and administrative opinion in Member countries which favours an adaptive role for education. This is clearly a need, but it is necessary to remind ourselves, in the words of George Papadopoulos, speaking at the 1987 Kyoto Conference, that "education must not be assumed merely to respond to change ... education itself is a factor of change. Education has its own life, has its own objectives very often, and is an instrument in societies for bringing about change"[13].

In the light of this observation and the essentially pedagogical concerns it expresses, what is needed is a new balance. The view that education is a public good which represents an enduring part of our values structure is as relevant to the debate as is the perception of education as an instrument – and servant – of public policy aimed at achieving specified economic and social outcomes in given circumstances. The OECD seems an appropriate forum for the necessary debate that must precede any new concord between the education purists, the economic rationalists, and the political realists – provided, that is, discussion can take place across as well as within these several domains.

Demographic, Economic and Political Factors

We turn now to three of the changes which, in the Member country reports preparatory to this study, were identified as highly significant for curriculum policies and pedagogical practice. These can be broadly described as demographic, economic and political trends. Demography is identified as a major consideration affecting thought and action on the curriculum, for example in Australia, England and Wales, the United States, New Zealand and the Netherlands where rolls are more or less stable or are declining. Not uniform either by level of schooling or by region, these declines in some countries constitute a major challenge whether in resourcing schools, training and employing teachers, or determining priorities for curriculum development. Such demographic trends underline the value of flexible structures, staffing policies and resource allocation procedures. Most countries, however, are struggling to achieve such flexiblility.

Overall stability or decline of school population can mask significant sectoral growth, as in the Asian and Hispanic communities in parts of the United States. Moreover, birth rate changes can be rapid, as in the case of Ireland, where the birth rate has dropped dramatically while an earlier "bulge" is still inflating enrolments. In France, there has been decline in primary school numbers, but rapid growth in student enrolments in prevocational programmes. In the higher technician courses in the second cycle of secondary schooling (years 15 to 18 plus) for example, numbers have more than doubled in ten years. Similar changes are occurring in Great Britain with a consequent focusing on both generalist and specialist prevocational training from the junior secondary years onwards in the school sector.

The challenge of falling rolls overall, combined with what may be quite substantial sectoral growth reflecting increased participation, now constitutes a serious adjustment problem. Nevertheless, this problem is less severe than the grave difficulty foreshadowed some years ago. In the case of Canada, after a rapid decline the rate has levelled off to less than 1 per cent decrease per annum and, at the secondary level, has been counterbalanced by improved retention beyond the compulsory attendance age and dropouts returning to complete high school diploma requirements. In common with most Member countries, Canada is experiencing a participation rate "boom" and the prospect of rates for 17 and 18 year-olds in the high 80 per cent and into the 90s is now a real one, given the percentages of the initial school enrollees from the early 1970s who are now staying on to year 12 or its equivalent. These levels have already been achieved in Finland, Japan, Sweden and Germany. In Australia, England and Wales, and France, the percentages are in the 60s and rising.

The participation trend is widely and generally upwards and all or practically all countries can expect over the next decade to confront the implications of virtually 100 per cent participation in schooling/further education throughout the whole period of adolescence and perhaps into early adulthood. Major questions arise, therefore, about the content of the curriculum, teacher-student relations, teaching methods, and learning processes, the implications for social life and the transition from school to work or higher education. We consider them in Chapters 5 and 6.

No less important than school population size and its sectoral distribution is school population mix. Whereas in Japan this may be relatively easily handled in a very largely (but not entirely) monocultural and monolingual population, in Australia, New Zealand, Canada, the United States and, in varying degrees in the countries of Western and Northern Europe, it is a very significant factor. Responses vary from comprehensive policies for initial teaching in the mother tongue, and the employment of nationals as teachers, to the

development of system-wide policies for multicultural education, deploying the criteria of social justice, social harmony and economic efficiency. There is, in several countries, an unacceptably wide range of retention rates (and school success) across ethnic groups. In some – New Zealand is a very interesting case in point – indigenous populations ("the people of the land") are the principal target of reform programmes.

These policies are not, however, uncontroversial and there is evidence – as Australian and Canadian documents demonstrate – of a growing reaction with strong political overtones. The need for curriculum and pedagogy to embrace a wide range of requirements in respect of mother tongue teaching, national language, ethnic-related socio-economic disadvantage and cultural pluralism in values and lifestyles is growing, not diminishing.

Mention must also be made of gender mix, the concern being expressed in several countries at the disproportionate male-female enrolments in science and technology courses in the middle and upper years of schooling, and the sex role stereotyping that remains a dominant feature of pedagogy. These concerns are well documented in the OECD report *Girls and Women in Education*[14].

Economic factors appear to be dominant in determining at least the context for rhetoric debate and policy formulation in many countries. These factors include structural changes in the economy as wealth production shifts (albeit unevenly) from agriculture and traditional manufacturing to the service and finance sectors; the oft repeated need for new forms of technically-defined skill in the labour market; governments' emphasis on the role of small business and related entrepreneurial and managerial skills and changing trade, current account and credit/debt balances. Although there is a considerable debate on these and other factors within and across the OECD countries, and we must recognise that different perspectives result in different interpretations and policies, there is a virtually universal trend towards a renewed analysis of schooling as an instrument of national economic policy. The proceedings of the OECD Intergovernmental Conference on Education and the Economy in a Changing Society demonstrate this in no uncertain terms[15].

The reasons for this renewed interest in education-economy relations have been substantially documented in OECD literature and may be traced not only to the long-term effects of the oil crisis of the early 1970s, and the subsequent reviews and reductions of public expenditure in most Member states but also to the strong competitive edge in international trading and financial relations. Education is given a classic, Adam Smithian role in wealth production and wealth recovery. While this is most noticeable in the substantial debtor countries (e.g. Australia, the United States) it is not confined to them and indeed has a reciprocal effect. One example is the recent Japanese endeavour, through the Prime Minister's National Council on Educational Reform, to internationalise the curriculum to encourage in Japanese youth a deeper understanding of their country's growing worldwide role and responsibilities.

Financial stringency is having noticeable effects in policies for schooling, in the way it is fuelling such diverse concerns as interest in accountability and other efficiency measures, performance indicators and managerial approaches, training and work preparation in the upper years of secondary schooling and renewed emphasis on basic skills in the early years of primary schooling. There is a strong flavour of the national efficiency movement which has surfaced periodically in several Member countries ever since public schooling became a large-scale public enterprise[16].

These very strong current policy *motifs* could perhaps change were there to be a sustained and general uplift of economic activity but they seem set for several years to come. What is most noticeable in the discussions on this point is the realisation that an integrated, cross-sectoral approach is needed: educators, economists, social planners, busi-

ness people and union representatives should get together. This need is well recognised in Sweden, for example, in Australia and in the British movement known as "The Industrial Society". That can be more easily achieved at the levels of policy-makers, administrators, and representatives of organisations than at the classroom level. Moves are, however, underway in many countries to improve the interaction of teachers with the workplace and with community bodies. By such means there can be a practical integration of economic, social and educational considerations which, at present, are all too often overstated at the global level and underestimated at the level of school practice.

Educators are under considerable pressure to demonstrate that the positive outcomes of schooling are reflected in improved performance in defined priority areas of the curriculum. Critics and sceptics notwithstanding, national education systems have been remarkably responsive. Consider, for example, France where the number of young people obtaining the *Baccalauréat* has increased eightfold since 1950. In several systems, including France, the United Kingdom and the United States, there is a growing emphasis on those performance indicators which provide the public with information on nationwide standards of student attainment. There are educational and financial costs, as well as benefits, in this drive. Educators need to keep matters in perspective.

The economic criteria of efficient and effective use of public resources are evident in this trend. Although other factors are at work as well, there is no doubt that continuing national assessments of the economy and initiatives by governments to restructure and better manage their economies are having a growing influence on national decisions about school development and the curriculum. They are less evident in pedagogical change, the sphere which is being very largely left to the teachers whose opportunities for innovation are, nevertheless, reduced under continuing financial pressure in many countries.

Mainly in the Anglo-Saxon countries, there are very definite moves towards central control and direction of the broad outlines of the curriculum and of assessment. There is nothing novel in this in Continental Europe. Recent statements by the Australian Federal Minister of Employment, Education and Training point in this direction. But by far the most striking case is the 1988 Education Act in Great Britain, one of whose effects will be to introduce (or reintroduce) a national, centrally determined and monitored curriculum in predefined core subjects and to establish nationwide testing for all students in government schools of the ages 7, 11 and 14. Economic factors frequently merge into political considerations and the realm of ideology.

The political and ideological balance of forces in many Member countries is very significantly different in the late 1980s from what it was in the mid to late 1960s. Most striking, in its implications for school development and learning, is the emergence of new forms of political conservatism including the so-called "New Right". Such conservatism is not confined to the parties traditionally to the right of the political spectrum and may be taken to indicate a general shift in electorates towards more caution in adopting widespread social change and greater attention to core social values. Some commentators have interpreted this as a reaction to the immense range of social reform movements and the rapidity of those introduced since the 1960s combined with what is often claimed to be a relaxation of society's expectations of youth and young people's standards of conduct. Others emphasize the bewildering effect worldwide of issues arising from genetic engineering, weaponry, pollution, urbanisation and similar forces which seem beyond the control of the citizen. In either case there is evidence that the issue of values is becoming more salient in debates about curricula and pedagogy at all levels and stages of schooling.

At the extreme right of the political spectrum there is a perpetual demand for value indoctrination which might include patriotic citizenship values or dogmatic socio-religious

beliefs and values. More widespread is a well-balanced debate, as in Norway, between advocates of traditional ethics, with a definite religious basis, and a secularist and social issues perspective. Educators are naturally wary of indoctrination, whatever the community pressure may be, but they are often unsure of their role in values education.

Underlying these tendencies and the debates surrounding them is a sense of unease at the prospect of social disorder or disharmony, or just disquiet or dismay at the breakdown of traditional values and habits of conduct. The latter concern is most evident in the Japanese Prime Minister's National Council on Educational Reform which has trenchantly criticised the "desolation" of modern Japan. It also finds expression in the United States where values education has been strongly urged upon schools by the successive political administrations. It is not surprising that schools are experiencing difficulty in finding adequate responses to the challenges they face in determining an appropriate stance towards values education in the open, democratic society.

As mentioned, Norway provides an interesting example of continuing, unresolved debates in the realm of norms and values, both cultural and religious/ethical. This is in the context of a traditionally religious society (and schooling) encountering the full impact of a secularising age. Similarly, there is in Norway a "back to basics" conservative reaction to the historic broadening and extending of education up to the school-leaving age. This reaction is indeed widespread in many Member countries including Australia, England and Wales, the Netherlands and, very conspicuously, the United States. In the latter country two widely distributed reports by the then Secretary of State for Education, respectively on elementary and secondary schooling, highlight what Mr. Bennett described as a growing national concern about the fundamental values of American life and the role of the school in promoting them[17]. In another case, France in 1986 commenced a new programme of compulsory civic education in the college (junior secondary stage). The amount of attention now given to vocational/work preparation education in the secondary schools of France, Great Britain and many other countries also carries an important message about values: the values of the work ethic, of skilled performance and the discipline of formal training in highly structured school-work environments.

Closely associated with the "basics" drive and the endeavours being made to determine key or central values in the curriculum (e.g. disciplined knowledge, persistence, achievement, orientation, skilled performance) is a growing emphasis on assessment of performance. Indeed, moves towards a performance assessment in the curriculum almost invariably start with the subject areas of language and mathematics which in practically all countries form the "core of the core" in primary schooling. From all of this it might seem but a short step to reviewing and assessing the quality of schooling conceived as measurable outputs – and analysing relations between such output measures and the inputs which are most easily quantifiable in terms of recurrent and capital expenditures: salaries, equipment and materials, buildings. With the aid of computer models, statistical tables or even the backs of envelopes, this is a seductively easy path to follow but no system has demonstrated just how these relationships work in practice.

Who Should be in Control?

In a broad sense, many of the foregoing concerns are less technical than political inasmuch as their focus is control, the criteria against which control will be exercised and the hands in which control will be vested. More generally, the issue is the distribution of power and authority. The trend towards controlling the broad framework of the curriculum in the name of a predefined national interest and through a central authority with political

backing is the most pervasive of the current trends. This is true whether the mechanisms are central ministry directives, processes of national consultation or guidelines for local decision-makers. The liberal tradition is squeezed between the political right (which claims a new liberalism) and the far-flung apparatus of central government.

Disentangling the factors of: *i)* finance and political power from *ii)* the culture of schooling, the structure and organisation of the curriculum and pedagogy; *iii)* access to and participation in the benefits of schooling; and *iv)* evaluation and accountability measures, is now virtually impossible. This itself is an indication of the extent to which prevailing assumptions about the "proper" relationships between school and society appear to have overtaken the internal dynamics of the education system in the change process. Put in a slightly different way, the displacement of the educational professional by the administrator, manager and politician appears to be gathering pace in several Member countries.

It is necessary to use the qualifier "appears" since we must distinguish between, on the one hand, what might be termed public arena discourse on educational policy-making and, on the other, the structure, organisation and processes of education itself. Much of the national level public debate and the rhetoric surrounding education typically seem to leave the schools, the teachers, students, parents and even the local communities unaffected. When there are observable effects, they are mediated through the inner dynamics of the school system and through local concerns and interests. Power and control may be consolidated in the discourse of policy but fragmented in the much wider and more diffuse field of educational action in regional and local authorities and the schools themselves. This fact, together with a dearth of research on educational practice, makes it exceedingly difficult to generalise about on the ground changes in school practice.

From another perspective, it may be observed that there are several levels, dimensions or aspects of control. They interact in determining outcomes in action, including outcomes in curriculum and teaching practice. Thus, "control" functions at the level of the broadly-stated general aim, the subjects that are required to be taught, the resources provided to support that teaching, the training of the teachers and their selection, and the pedagogical and organisational processes of the school. It would be an interesting study to plot each country's position on each of these dimensions in a comparative analysis. That would be, however, only a first move and not a very profound one at that. What has to be explained is the inner dynamics of the different systems. We can observe similarities in these across many if not most Member countries.

There is nothing new about the affirmations of a national as distinct from individual or sectoral interest in curriculum and the outcome of schooling. Every country report prepared for this study refers to this in one way or another and, in every case, there is a discernible stirring at the national level. This in itself opens up the debate on who should control the curriculum. As we shall see below, in some countries the very concepts of education and schooling are historically intertwined with nation building[18].

A distinction is commonly made between centralised and decentralised decision-making to explain differences in action on these different dimensions. But such a sharp and uncompromising distinction is clearly inadequate in the situations we are now addressing.

First, it presupposes a simple dichotomy whereas the reality is one of a range from single national authorities in unitary States to federal arrangements, and mixed systems which involve substantial regional or local authority. Many different examples might be cited but let us consider Canada, where education constitutionally belongs to the provinces and where the federal government exercises certain powers, e.g. in relation to languages and minority groups, and the local school board exercises authority over the operation and

administration of the school systems and the implementation of the curriculum, under delegations from the province.

Second, there is commonly a sharing of roles and responsibilities between a mixture of agencies and institutions, both public and private. This reflects the historical legacy as much as it does a formal division of power. Private education arrangements illustrate these points very clearly in the older European societies such as the Netherlands, England and France, but also in Australia where private schooling is not only educationally significant but an important electoral factor.

Third, and of crucial importance in several countries at present, there are changes taking place in the nature of control and influence and the manner in which they are exercised. These cut across administrative and even legal structures. The accountability movement, for example, is no less important for within-school procedures than for the operations of national systems.

As the author of the Finnish report remarks, education is on the move, change is continuous: "The whole education system is actually on the go, since the message of the necessity for continuous change has been widely accepted in society". Yet the change, even within Finland, a relatively small and homogeneous country, is not uniform or consistent. The broad structural reform of schooling, achieved in the 1970s, has reached stability and energies are now directed towards content and working methods in schooling and the restructuring of vocational and adult education. Since administration, in that country, is organised at central, regional and local levels and since there is a move to strengthen local roles, Finland exemplifies the point that control is shared and that the centralised-decentralised dichotomy no longer captures the essential features of control and decision-making. The situation is similar in Sweden, New Zealand and Australia. In France, often held up as a model of centralised control, moves, for example towards elaborate consultative procedures at all levels from the central Ministry to the individual school council and towards greater involvement of teachers in the determination of teaching methods and student evaluation, introduce new perspectives into the analysis. We must conclude that in several countries there is very definitely a shifting pattern whereby the conventional centralised-decentralised distinction is breaking down, as both devolution and new forms of concentration are occurring.

Changes in patterns of control over curriculum and pedagogy point towards new forms of concentration of power. These changes help us better to understand an important shift in the inner dynamics of the education system. A typical observation is that in the Canadian report, "the predominant trends in curriculum reform are toward infusing school programming with a stronger sense of direction and, concomitantly, subjecting its outcomes to a more rigorous and systematic assessment". Whereas, in the 1960s and into the 1970s, curricular and pedagogical reforms were powerfully influenced from within the subject disciplines, by developmental and cognitive psychology and to a lesser extent by a newly emerging sociology of education, and by the expansion and development of teacher education, the orientation now is much more towards social policy issues. This represents a profound shift of ethos and values, as it were from the inner-directed to the outer-directed.

In the Netherlands it is well recognised that power and authority must be shared between home and school and such community organisations as the churches. This is not to say, however, that there is a stable balance among these three. There is a lively debate on the need for schooling to help ameliorate such social problems as vandalism, drug abuse, violence and sexually-related disease, together with renewed calls for schooling to focus on "the basics" and leave more scope to homes and churches for civic and moral education.

This mix of trends raises questions of national priority as well as the distribution of authority. It is precisely the felt need to shape policy for schooling around priorities that is the nub of a major debate: governments affirm national or state/provincial needs to which they wish curriculum decisions to respond; community interest groups, professional bodies (including teachers) often affirm different priorities. Countries are recognising a need to be clearer about which of the many functions or roles of schooling are to receive the greatest, most urgent treatment and how, and which of the numerous educational tasks that need to be performed, can be left to agencies other than the school.

There is perhaps an undue reliance on the written word, the guideline, the policy directive, or even the legislative enactment in sorting out issues such as these. Policy is often formulated through glossily printed texts issuing from central sources. Thus, a recent summary of government policy statements and initiatives in the Australian State of Victoria draws attention to the contribution a well-planned general education can make to the government's policy commitment to a Youth Guarantee, and to explicit strategies to achieve social justice and strengthen the State's economy. Roles of teachers, parents, school boards and central authorities are indicated[19]. But many teachers and school councils do not read such texts. When, as happens, they are translated into guidelines, there is uncertainty about the degree to which a guideline is prescriptive or merely hortatory. An alternative to guidelines is, of course, legislation, together with regulations: common devices for prescribing curriculum in broad terms.

In England, the Secretary of State for Education and Science, in outlining his government's intention to regain control of the curriculum through a national core curriculum, gave weight to the country's needs in an age of acute international economic competition. Opening the Second Reading Debate on the Education Reform Bill in the House of Commons, Mr. Baker said "Raising the quality of education in our schools is the most important task for this Parliament". He embellished his speech with a quotation from a nineteenth century Conservative Prime Minister who, in 1874, informed the Commons that: "Upon the education of the people of this country the fate of this country depends"[20]. Not to be outdone in the House of Lords, Lord Jenkins, echoing a motion of 1790 from John Dunning, proposed "that the influence of our Executive is increasing and ought to be diminished".

Mr. Baker, however, argued that in order to achieve all that he sought – which included devolution to headteachers, governors, and freedom to parents – to release energies, "we have to use the central power of Parliament. It is a paradox. But it's one thing to use the powers of central government to take power into the centre, and quite another to use it to devolve power to the citizen"[21].Mr. Baker's Bill nevertheless provoked controversy on a scale not witnessed in British education since the Second World War. The wings of controversy were neatly adumbrated in an editorial in *The Times Higher Educational Supplement*: "Mr. Kenneth Baker's Great Education Reform Bill', which is unlikely ever to lose its ironic inverted commas, is a contradictory measure. It seeks both to aggrandize the power of the state and to encourage unregulated free market choice"[22]. Unperturbed, Mr. Baker in introducing the Third Reading described it as a "landmark in our educational system" while Prime Minister Thatcher credited her Government with introducing "sweeping reform in the educational system in England and Wales"[23]. The British case may be extreme but it very sharply points up the paradox: more central control is required to achieve more local freedom.

Yet another approach is illustrated in the widely read and vehemently debated American document *A Nation at Risk*, which was assiduously promoted by the U.S. Department of Education and has provided a kind of fundamentalist text on new directions[24]. Such a

basic approach to text writing seems necessary if a message is to be clearly and widely disseminated to a large and diffuse population. But just because the text proclaims a point of view, or a policy, it is all too likely to generate a powerful opposition. This is nowhere better illustrated than in France: the more assertive and incisive the national education authority, the more likely is the reform to fail. This, again, shows up the limitations of the conventional analysis of centralised vs. decentralised decision-making. It appears that the shifting relationships between powerful, concentrated centres and the dispersed field of operations need a reconceptualising to take us beyond the now sterile dichotomy of centralised vs. decentralised.

Education and National Self-image: the Public and its Problems

Throughout the 1980s, American reports on the new directions felt to be needed in schooling have underlined a perceived crisis in national economic and social affairs, a crisis moreover which was held by some, in chiliastic vein, to be at the very roots of American culture. This at any rate was a pervasive theme of the core document of the reform movement, *A Nation at Risk*: "The educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future".

It is instructive to compare the American (and to a lesser extent the British) soul searching with that of the other countries that have contributed to this report. The style and tone of Finnish official statements are restrained. They quite systematically treat the curriculum of the elementary and secondary school as an integral part of overall social policies, focusing on educational and social equality, the relationship of knowledge and skill to changing production requirements, democratic citizenship and cultural activities. The approach is measured and there is a sense of steady achievement in addressing national goals and priorities.

The current overall reform in Japan – consequent on the 1985-87 review, the latest in the regular ten-year cycle – is predicated on widely discussed views about so-called "school desolation": school violence, bullying, excessive competition, intense pressure on students, resistance by students to the demands of schooling, a decline of moral standards.

It is a matter of debate how far such problems reflect wider concerns, such as socio-cultural problems and the role of the school in addressing them – or not, as the case may be – and the industrial and technological revolutions and their impact on the international community in which Japan increasingly sees itself as a major player. Social and cultural concerns were highlighted in the remit to the National Council on Educational Reform which was specially established by the then Prime Minister in September 1986, "in light of the urgent need to secure an education adapted to the social changes and cultural development of the nation ... (for the purpose of) designing necessary reforms with regard to government policies and measures ... and with a view to securing such education as is compatible with the aforementioned changes and development" (Law for the establishment of the National Council). It is noteworthy that, in establishing a National Council at all, the Prime Minister affirmed the national importance and scope of the reforms that were needed. In presenting his thoughts about the likely direction of the reform, Professor Michio Okamoto, Chairman of the National Council and therefore a key figure in what promises to be a significant series of developments in national education, saw late 20th century educational change as the harbinger of a 21st century in which, he said, "Japan would go out to meet the world"[25].

In its reports, the Japanese National Council criticised the materialism and conformity of modern society, its neglect of the qualities and needs of individuals and of human values. But education itself must share responsibility: the educators were reproached for failing to keep pace with these changes. From the Japanese perspective, school curricula and pedagogy have a vital role to play in restoring a worthwhile culture. Substantial changes in education are required to equip individuals with the ability to cope with "social changes in the future". In the context of the reform proposal this statement refers as much to new attitudes and values (or perhaps the reaffirmation of some established but increasingly taken for granted values of the culture), alongside a scientific-technological-international mind set, as to the flexibility and adaptability to change so frequently enjoined upon students in Western societies. The Japanese are saying that they are experiencing too much of one kind of change.

The Japanese situation and reform proposals seem to highlight important tensions with parallels in all countries: control, order and direction to meet common and shared social needs, and individualistic and humanistic values to satisfy the aspirations of the individual person; the harnessing of economic growth and technological change in the interests of an enlarged, not a diminished humanity. Since the early days of the European scientific revolution, this has been the dream of the Utopians. It is fascinating to find it at the centre of contemporary policy debates on public education.

Schooling is widely and naturally looked to as a means of creating and recreating the social order. In the Durkheimian words of a former French Director of Education, "The public education system underpins republican society from generation to generation. Destined from the outset to promote instruction, it continues to do so today." Yet, he says, it is confronted with the most severe challenges, "in an economy in crisis where qualifications have to be raised, in a country which traditionally welcomes large numbers of refugees to make of them free and responsible citizens, and in a society dominated by the media which put out a great deal of information but little knowledge. In so doing, it emphasizes the essential link between knowledge and liberty"[26].

From a curriculum perspective, the perennial questions of what kind of knowledge, who determines it and how it is articulated are of course crucial. When government-proclaimed national priorities and needs are perceived as the chief determinants, the needs and interests of the self-determining individual or sub-group may seem in abeyance. Yet the liberty of the subject, the health of the society – and its economy – and education are inextricably linked. Education is part of the national image. It is in the United States of America that what is referred to in that country's report as "an integral relationship between effective education", and the country's welfare is being most vehemently and comprehensively debated at present. As in France, liberty is at stake but the liberty in question has a great deal to do with the nation's declining economic position and the need "to sustain the American position as world leader."

Perceptions of the relationship between education and national well-being, as the authors of the American report indicate, are not of recent origin. Indeed in that country they have underlain discussions of curriculum and schooling since the time of European settlement on the eastern seaboard early in the seventeenth century. Historically, this relationship has reflected the successive ideological, normative and intellectual waves, of seventeenth-century theocracy, eighteenth-century enlightenment and nineteenth-century republicanism and nationalism. Despite the endeavours of fundamentalists and absolutists of different persuasions, whether religious, ethical, political or whatever, it has been generally understood in modern times that the school aims to foster the individual and at the same time to be an adaptive institution. As such the school adapts to the culture of the

society, reinforcing and reproducing it, or in some measure assists in the making and remaking of culture.

These orientations towards schooling are as strong and evident in the United States today as at any previous time in history, and their interrelationships seem as ambiguous as they are necessary. This level of concern may not be quite matched elsewhere but, as mentioned above, the establishment by the Prime Minister of a special National Council on Educational Reform in Japan and the powerful new education legislation in Great Britain throw into relief the potential if not the actual conflict within the culture – between the declared needs of the State and the proclivities of its citizens, between public and private interests. If not the identity of the nation, then at least its underpinnings and its relations with other countries provide governments with ways of challenging education.

International comparisons of performance are popular if frequently of dubious validity. The initiative generally comes largely from central government itself or from central government agencies, where it is not a venture of the international testing industry. While such initiatives are paramount in the United States, it should not be forgotten that they are paralleled by an unprecedented outpouring of critiques, reviews, proposals, conferences, colloquies, seminars and meetings organised by numerous non-government bodies.

There is no lack of public engagement with educational issues in a number of Member countries. Like the United States of America, Canada has in recent years subjected itself to a series of well publicised reviews, commissions, evaluations and research studies. For practically every province, there have now emerged curriculum proposals and packages, the majority of them providing for firmer direction, more definite (and obligatory) curriculum frameworks, and more use of assessment, evaluation and accountability measures, in the national or provincial interest. These measures reflect a wide assortment of public concerns as the comprehensive reviews of education at both elementary and secondary education have been completed. There are also very specific instances in Canada of the readiness of sections of the public to address particular problems or issues as they perceive their interests to be threatened (interest groups as a major force in educational policies). Government "interference" (e.g. the private school issue in France in 1986) is fiercely resisted where strong private sector interests are at stake.

Although in some countries there is little overt evidence of major controversy about the directions of policy for curriculum and school practice, there may be, nevertheless, a powerful undercurrent of interest in proposals for change. The media play a major role in focusing – and at times fermenting – concerns and highlighting issues to which education authorities are perforce obliged to attend. Articulated public concern can be a major factor inducing change. The reform of the Italian primary school, discussed in Chapter 5, is a case in point. As the public authorities make more efforts to consult and circulate ideas and proposals for comment and as the media increasingly highlight educational issues, so does the public engage in the politics of educational participation. Several of the country reports provide instances: in Australia, examples include the heightened interest in the skills training role of schools, student choice in the curriculum and performance testing. In the Netherlands, environmental health and moral issues have surfaced. There is ample evidence that education is being taken into the public arena. There are different ways of doing this: political figures and opinion leaders make extensive use in the media for promotion of ideas and are in turn influenced by media-responses. Expert committees and commissions are commonplace and reports multiply. Well-organised interest groups play a key role in the political process. In many countries, it is now standard practice to issue consultative documents not just to professional groups but widely across the community[27]. In Sweden, for example, this has been the case since the 1970s.

During its three years of existence the Japanese National Council met 668 times, had 14 public hearings in different parts of the country with a total of 5 500 participants and heard the views of 483 experts; its members' ideas and other items were published in a monthly bulletin and collective conclusions and recommendations were embodied in interim reports which, after public debate, were turned into four official reports. In Saskatchewan, the 1984 review of curriculum and instruction attracted some 40 000 written items in the form of completed questions, briefs and letters. Likewise, in New Zealand quite remarkable levels of participation were achieved in the recently completed Review of Curriculum for Schools: 21 500 submissions in response to the Committee's invitation to members of the public to make their views known and 10 000 responses to the draft report. There was a similar response to the New Zealand Government's Task Force to Review Educational Administration.

Participation as a process has it effects. According to the authors of the New Zealand report, "The extent and quality of the submissions have influenced developments in the curriculum for schools, even in advance of final acceptance of the document." Snippets from citizens' comments on public education and proposals for change, published or official documents reveal a wide spectrum of opinion which is extraordinarily difficult to reconcile.

Increasingly, proposals for changing school curricula, teaching and learning procedures and related matters are drafted as texts suitable for public debate and discussion – and, as we have seen, the public are responding, critically yes, but also positively and constructively. It is necessary to correct an impression that publics in Member countries are generally dissatisfied with schooling. Misleading reports in parts of the media have given rise to a myth. The reality is often different. Sweden can be taken as an example of a country where opinion polls demonstrate public confidence in education. Research evidence generally indicates high levels of satisfaction even where specific changes are sought. There are exceptions, no doubt, but from the information amassed in this study they are just that.

In this chapter, the emphasis has been on the response of education and educators to wider changes in society. Educational change, its pervasiveness notwithstanding, is not, however, universal. In some countries there is a high level of satisfaction with the *status quo*. This may well reflect a desire to keep intact an image of social, economic and educational well-being. In others, and the Swiss report outlines the problem, traditional academic values are rooted in the substratum of the culture even if there is a strongly felt need to change them.

In Germany, for example, there is a general satisfaction that policy has been implemented well and that, all things considered, it may be better to leave well alone than to embark upon curriculum adventures. It is reported that there is even a standstill of educational policy, there are no new policy initiatives and the period since 1975 has been one combining a cautious educational conservatism ("let us not abandon what we have achieved for the sake of the uncertain benefits of change") with outright scepticism about the results of the reforms of the preceding decade. Germany and perhaps other German-speaking systems are exceptional in this degree of caution over educational change. The explanation in Germany may lie as much in nervousness over the economy, political polarisation and the lack of a new political ascendancy (such as exists in the United Kingdom and the United States) as in considered responses to what was or was not achieved by way of educational reform between 1965 and 1975. The American and Japanese situations, by contrast, seem more indicative of an emerging international trend of events than is the German one.

A Résumé of Educational Responses

No general overview of trends in policy debates about schooling in Member countries can hope to be conclusive. At best, in the foregoing section a sample of direction and trends has been presented, in the context of ways in which education is responding to social, economic and political change. The terms of the general debate, the directions in which school development and learning are moving may be briefly summarised:

1. The reforms of the 1950s and onwards in school structures and organisation, leading to improved access and opportunity, comprehensive systems, the common school, the reduction, elimination or modification of selection by examination at different stages of schooling, and to the spread of educational opportunity broadly across the whole age group, are largely accepted and are being consolidated and refined. The German-speaking countries did not generally adopt the comprehensive school but reformed from within. Examinations have changed where they have been retained and there is a revival of interest in them in some countries and a growth of attainment testing.

2. Attention in policy formulation and public debates is turning increasingly towards the content and quality of what is taught, raising standards of achievement (in the sense of comparability of standards across a whole system), responsiveness to defined student, parent and community needs, the conditions of teaching and learning in classrooms and schools, and the efficient and effective management of classrooms to achieve desired learning outcomes. Public accountability is emphasized as is also an insistence that educational structures and practices should fit the present needs of the economic and industrial sphere.

3. While the needs of special groups of students (e.g. special gifts or talents, handicap, ethnic minorities, girls, and technical subjects) are widely acknowledged, with specific provision of programmes and resources for purposes of school organisation and curriculum planning, mainstreaming and a common core curriculum are emphasized in many – but not all – countries. The "neglect" of gifts and talents is seen as a problem in some systems. There is a tension between a common core for all, which is usually grounded in a theory of general education, the vocationally inspired drive towards practical and useful knowledge and skills, and those highly individual needs and interests to be found among diverse student groups.

4. Most noticeably in the countries where there is widespread public criticism of or concern about the performance of the education system, there is considerable progress in defining the characteristics of successful schools. Much scientific effort has gone into evaluation and research studies on the results in schooling of intervention strategies and the conditions needed for successful teaching and learning. Hence the interest in the United States in "better schools" and "what works" and in the United Kingdom, in "good practice". Educational inspectorates, for example in the United Kingdom, Sweden and France, are recognised as indispensable indicators in the process of establishing quality in the changing circumstances of schooling.

5. Although there is consistency in the commitment to reform and improvement as a general educational orientation in a period of considerable social, industrial, scientific and technological change, there is little agreement about the fundamental educational rationale for or even the directions to be taken by many of the

changes. There have been profound disagreements in several countries, stretching back to the 1960s and earlier, involving child-centred or child-oriented developmentalists, liberal humanists, vocationalists and economic rationalists. Governments having no monopoly of insight into or sensitivity towards educational issues, it is instructive to consult the literature of professional and academic bodies and community interest groups in order to draw out the different dimensions of the debate. Of particular significance is the fact that much of the national level drive towards more work-oriented, efficient, cost-effective educational programmes is widely criticised as a form of managerialist technocracy. There is a considerable gap between system managers, policy-makers and politicians on the one hand, and leading professional figures and groups on the other.

6. Growing interest in a common core curriculum denotes at least a readiness in countries to search for agreements on a common ground and to focus curriculum priorities. It seems to be very widely agreed that general education should continue throughout the whole period of compulsory schooling, that it should be broad and fundamental but with an increasing orientation towards working and adult life, a high level of (transferable) skills and committed citizenship. There is rather less but still a growing commitment to continuing, lifelong education of which schooling forms the first part.

7. The question of who shall control education, who shall provide the resources and how educational policies and procedures and the use of resources are to be accounted for is of widespread concern. In most countries, we find mounting evidence of increasing central government intervention, not always directly but through fiscal and financial policies, regulatory procedures, monitoring and evaluating, guidelines and the like.

8. While education is universally recognised as a mechanism of social adaptation and adjustment, by those outside as well as those within the profession, it is mainly the latter who are drawing attention to the need to understand and come to terms with changing student values and lifestyles. In the eyes of some of the critics, some proposals for reform, however, seem to treat the students more as the objects of policies designed to achieve goals of national renewal and development than as human participants and partners in the educative process. Thus, the industrial notion of quality control, the preoccupation with adjustment to technological change and the growing interest of ministries of industry, commerce, trade and labour are not always interrelated with personal, developmental models of schooling. The result can be a certain incoherence in overall national policies. This indicates a need both for closer interaction among the numerous interest groups and more sophisticated models of educational, economic and social development. New Zealand and Finland are among the minority of countries that seem to stand apart from many of these trends. After several years of intensive debate and a series of not always well articulated initiatives, in Great Britain there now seems to be a new coherence and integration of policies and programmes.

9. National level curriculum and pedagogical change cannot be achieved by working on the curriculum and teaching methodologies alone. School organisation, teacher education, terms and conditions of service, school-workplace relations and school-community values impact upon the curriculum and ways of teaching and learning. They all are part of an exceedingly complex picture whose elements

are interrelated. Pressures for curriculum and pedagogical change are coming from outside education as well as from within, they are indirect as well as direct and the achievement of change requires, it seems, widespread participation. This, however, often as not, is in the form of a power struggle, not a concerted drive.

10. The educational response to the wide array of changes and trends touched upon in this chapter has been considerable. Educators need, however, to continue to draw them to the attention of those elements in the wider public which remain critical and whose support for educational development is needed. The curriculum responses will be discussed in ensuing chapters. They include: the introduction of new subjects (e.g. computer science), or the further development of earlier innovations (e.g. primary science, environmental studies), the continual updating of content across the curriculum, numerous attempts to give subject content closer relationships with everyday and working life, attention to values education across the curriculum and student- and group-centred pedagogical innovation.

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Chapter 3

CHANGING CONCEPTS AND PRACTICES IN CURRICULUM AND PEDAGOGY

Not all countries would agree with the view expressed in the report from England and Wales that the curriculum issue is at the centre of the national educational debate, and at the centre of the curriculum issue is the government's drive to establish a national core curriculum. Nevertheless, many of the broader educational concerns that have already been outlined in this report either directly give rise to curriculum issues or have discernible curriculum correlates and consequences. Curriculum may not be at the centre of the debate about schooling everywhere but it is certainly close to it in most countries. And control of the curriculum and its relevance to nationally defined needs are the two principal platforms from which that debate is most often entered.

Towards Wider Definitions and Uses

We must be clear about the ways in which the terms "curriculum" and "pedagogy" are being used. That is not easy, if only because of the flexibility, not to say ambiguity, of the English language. We find reference to subjects, subject matter, courses or programmes of study, curriculum guidelines, syllabuses, and to qualifiers such as the core, optional, activity, experienced, hidden, academic and vocational curriculum. "Pedagogy" is a term that is often used but seldom defined. Certainly there are no crisp, clear and agreed definitions. Yet, the preoccupation with utilitarian objectives notwithstanding, there is everywhere a growing acceptance of broad definitions that encompass a wide range of learnings and practices in a variety of settings. This is true, even in countries where, traditionally, official interest in the curriculum has been sharply focused on syllabus, text and guideline, and pedagogy is predominantly a transmission process. Thus, somewhat rhetorically but with clear point, a French writer defines curriculum as a document of "a high style demonstration type", "a mode of communication addressed by the Minister to the citizens in readable prose – but in the language of the State, speaking about education in the general interest"[28].

The reference to a public form of discourse is crucial. Given the vastly changed circumstances of schooling, "curriculum" cannot be restricted to the academically-defined content of the syllabus and its organisation, that is, its arrangement and presentation to learners by teachers as a form of information transmission. Such a specialised approach has, of course, validity in its own terms, yet it misses an important point: the totality and the

interrelatedness of the learners' experiences within the ethos of the school, and the relationships of these experiences to the wider socio-cultural milieu. Reference to "a mode of communication" is also a reminder that curriculum can equally be conceived as a mode of delivery, or services rendered, and the learning experience, as services received. The two are by no means the same.

Educators must concern themselves, and are doing so, with the broader, public concepts if the objectives, goals or values that are so often used to define the purpose of schooling in the modern State are to be achieved. The syllabus, the text, the multi-media resources, the equipment, the laboratories, the classroom – they provide the means, and the setting, just as the teacher, in relationship with learners, provides the direction, the framework and the management of learning.

Increasingly, software systems and machine-operated learning designs are complementing the direct instructional role of the teacher and they must be included in an enlarged concept of the curriculum and its associated pedagogy. The curriculum, increasingly, extends beyond the teacher-controlled classroom and incorporates self-paced learning, whether or not in the immediate environment of the school. The transmission and inward-looking models of pedagogy cannot cope with these extensions and should be abandoned.

Resistance to this broader approach will scarcely be found among employers and politicians. They are urging upon the schools such requirements for students as flexibility of mind, initiative, adaptability, creativity, competence in problem-solving, multi-skills, ability to work in teams and so forth. There is still, however, scepticism if not resistance from the more conservative reaches of the teaching profession and from the narrow-minded critics who are still fixated on a rigid model of "the basics". Yet to be established within the curriculum, but well on the way, is what a Quebec report refers to as *la culture contemporaine*[29].

The key point is that, in considering the school's curriculum and pedagogical practice, we must address all of these elements in their wholeness and their relatedness. It is this that brings out the fundamental role of curriculum and pedagogy in any discussions about extending and improving schooling – but also the complexity of the issues and the difficulty of actually achieving reform instead of merely talking about it. Curriculum will thus necessarily include goals, values and modes of activity thought to be appropriate or necessary in order for desirable learning to occur. Curriculum inevitably, therefore, transcends the school and requires a school-parent-community partnership.

Pedagogy is in the translation of curriculum into the operations of teaching, and learning is sometimes equated with method, predicated upon a traditional distinction between curriculum as "content" and pedagogy as "delivery of content". Unfortunately, this distinction does not take us far since, even as "method", pedagogy is relational, or transactional. The pedagogical experience conveys norms and values, based on the belief that the teacher's role is to care for the learner's formation and that the learner is an active subject in the process of becoming self-determining. On this analysis, curriculum shades into pedagogy, and *vice versa*.

Such reforms as the translation of homework into independent study (in Scandinavian countries) or the Japanese commitment to and serious debate about an extended school day and the widespread adoption of project and group work, imply a wider rather than a narrower concept of curriculum. Equally, they bring out the interrelationships between curriculum and pedagogy in a reformed schooling. There is quiet but continuing progress in the adoption of such student-centred practices as independent learning, small group project work, organised field trips, structured student-student communication and block tim

tabling. Pedagogy was once easily distinguished from curriculum when the latter was a (centrally) prescribed body of subject matter and the former the teacher's freedom in communicating it. As we have seen, this is no longer what education is about.

As in France, so also in the United States, the United Kingdom, Japan, Italy, and indeed all of the countries participating in this study, there is a very obvious state interest in the curriculum ranging from requirements for subject matter learning to the goals of the system and the resources available to the teacher. The teacher's control over the process of teaching and learning is, however, still ardently proclaimed, a distinction which is sharply drawn in the Dutch report. It would be unfortunate, however, to leap to the conclusion that whereas the nation state and the various central authorities are the custodians of the curriculum (in the public interest), the professional role of the teacher is to be exercised through pedagogy and pedagogy alone. Apart from an active professional interest in school-based curriculum development and evaluation, such a precise division of roles and responsibilities overlooks the subtle and intimate relations between curriculum and pedagogy in a reformed education.

The pervasiveness of curriculum in the life of the school is well illustrated in the definition advanced in a 1986 publication by Her Majesty's Inspectorate (HMI) for England and Wales:

> "A school's curriculum consists of all those activities designed or encouraged within its organisational framework to promote the intellectual, personal, social and physical development of its pupils. It includes not only the formal programme of lessons but also the "informal" programme of extra-curricular activities as well as those features which produce the school's ethos such as the quality of relationships, the concern for equality of opportunity, the values exemplified by the way the school sets about its tasks and the way in which it is organised and managed. Teaching and learning styles strongly influence the curriculum and in practice they cannot be divorced from it."[30].

The recent British government legislation on the national curriculum, however, takes a less expansive and a more orthodox view which proclaims a subject-centred curriculum and elevates a small selection of the subjects of instruction into "the core". The national curriculum, in this context, is not what the HMI definition embraces but is really the national outline of the subjects schools are required to teach and students to learn, during the years of compulsory schooling. Alongside this is the move to establish nationwide testing. There has been, it seems, a considerable narrowing of the concept of curriculum from the HMI views being promulgated from the late 1970s to the mid-1980s and the Government's draft policy statement, *Better Schools*[31], to the legislation. One justification for this is the fragmentation combined with the excessive specialisation of prevailing practice. Another is the unevenness of performance across the country. It remains to be seen whether such problems will disappear or be alleviated. Already, however, there has developed an antagonism between central and local authorities as the balance of curriculum control has shifted.

Local education authorities in Great Britain have the responsibility for applying what some of them see as unduly specific national objectives and statements to local circumstances. What emerges is somewhat paradoxical: education is being deployed as an instrument of a broadly-based government reform policy which certainly includes a thrust towards more creative educational practice than is found in many schools and would seem to require a broad, open-ended approach to knowledge and its application. Yet the prescribed curriculum resembles a listing of orthodox subjects and is likely to lead to a

narrowing of focus. The British case, too, illustrates what might well be gathering tensions between the political-bureaucratic and educational professional groups.

Role differentiation is difficult to sustain in a period of large-scale change. Yet in the Netherlands, as we have seen, an explicit distinction is made between two elements in decision-making about the curriculum, viz:

a) The indication of subjects and subject matter, the determination of examination programmes in terms of subject matter and subject aims, the timetables;

b) the teaching and learning processes, didactics and methodology, the organisation of the educational process.

The author of the Netherlands report continues: "The teacher's freedom with regard to decisions concerning the second group of elements is considered very important whereas central government, school boards and principals impact upon the first. It is therefore necessary to clarify, in the broader concept of curriculum now in vogue, the extent, nature and limitations of authority over and responsibility for decisions about particular elements. Such clarity is not always evident in policy or practice." This is a masterly understatement[32].

The need for the clarification pinpointed in the Dutch report is all the greater given an increasing readiness in a number of countries to take a broader view of the curriculum along the lines indicated by the British Inspectorate. In Finland, for example, "Curriculum is considered an account of all the most important measures and arrangements to create conditions for favourable learning experiences, which are consistent with these goals" (Finnish report). The goals in question demonstrate the interpenetration of curriculum and pedagogy. They are summarised in a proposed change of direction for Finnish schools, from purveyors to passive students of detailed, information-type content to be memorised and towards promoters of opportunity for self-planned and self-governed activities by students. Such activities are designed to "develop their capacity for practical application of theoretical thinking and knowledge as well as their ability to understand the apparently more and more complicated world."

The weakness of one traditional educational approach, not only in Finland, was more than the narrowness of the focus with the consequent neglect or underplaying of facets of personal and social development. Of great practical moment has been, and often still is, the tendency to highlight specific themes and items of content which it proves all too easy for teachers to translate into information to be memorised and regurgitated in examinations.

Narrow concepts of curriculum reinforce poor teaching and learning practice. The emphasis on packaged content and highly competitive written examinations has had the no less harmful effect of overemphasizing theoretical constructs, terms, formulae and codes at the expense of exploring relationships between theoretical knowledge and the worlds of personal and social action. It is with this in mind that we can appreciate the significance of the new vocational thrust for the whole of the curriculum and approaches to teaching and learning. That thrust can be seen as part of a still wider concern to teach, and have students learn, the arts of applied thinking. Evidence of this trend is clearest in the Finnish report. It is apparent also in those from Australia, Canada, Japan, New Zealand and Turkey.

Catalogues of subjects and of information are not curriculum, although they certainly have a part to play. In a Secretariat paper already referred to, M. Cerquiglini draws attention, as do the Finnish, Dutch and other authorities, to the importance of public documents which incorporate a high level of educational analysis: "Curriculum: a list of knowledge and skills, classified rationally and by level". Curriculum, he says, "is the result of constant decision-making. It is not an encyclopaedia: the aim is not in some way to give a

picture of the world through the accumulation of scientific discourse; such an aim is secondary; what has to be done is, by reference to an established body of knowledge, to put such knowledge in some kind of initial order, focusing on its key elements for this purpose...Useless or badly assimilated knowledge has to be rejected". Education which is "basic" precisely for this reason, offers the elements of a living attention to intellectual skills and ordered knowledge: "to learn is first and foremost to classify: the discipline offers a tool of learning, a series of reference points, and an ordered scheme of knowledge".

Is this not to over-intellectualise matters? Perhaps not, since M. Cerquiglini concludes that the preparation of school curricula "takes place always at a point of intersection: assessment of living and necessary knowledge (evaluation by scholars), respect for the perception and learning capabilities of children (evaluation by educationalists), political will (e.g. promotion of artistic education as a subject in itself). Choices have to be made and explained, so as to allow objective criticism (evaluation by the citizens)."

These remarks contrast with the continuance, mainly at the secondary school level, of curricular practices which are at variance with the reform goals countries have generally proclaimed. Despite the introduction of comprehensive schooling, status differences between schools persist, and there is strong competition to gain access to schools (elementary as well as secondary) which have a better track record for entry to prestigious higher education institutions. Recent French and Japanese publications attest to this[33]. These circumstances in turn foster highly competitive examination and assessment practices, together with a narrowing of the curriculum and a restrictive pedagogy in which the purveying of information dominates. Students are trained to leap a succession of hurdles.

Further steps are required, if the reform movement is to succeed, beyond the structural reorganisation of schooling and the changes in direction for curriculum and pedagogy which have been widely adopted in principle. Well-designed educational projects and experiments to match the reform goals would be one practical way ahead.

Encouraging in this respect is a widespread and very significant renewal of interest in cognitive aspects of curriculum and learning, embracing developmental psychology, knowledge disciplines, and the burgeoning sciences of information-processing to which computer technology has given a very considerable impetus. The proposed new primary curriculum in Italy is heavily cognitive and much of the American debate has been directed towards ways of improving students' cognitive skills and the structures of knowledge they bring to bear on their everyday lives. Less clear, however, is just how the drive towards competitive conformity, with its strongly elitist and potentially anti-democratic overtones, will influence matters. The Japanese reforms, which directly address this issue, will be watched with great interest.

The curriculum is both an orientating and a mediating device, whether for better or for worse. Through the right kind of curriculum, students can be oriented towards the worlds of knowledge, culture, social experience and relationships. But the curriculum cannot be conceived as some kind of final and fixed entity – a list or catalogue of learnings as some of the back-to-basics advocates seem to believe. It emerges, or is constructed as an intersection between:

i) The perceived or hypothesised learning needs of the individual students;

ii) The structure and evolution of knowledge conceived as disciplines and tools for learning (and not, as in the university research institute, the latest template of a segment of the world of scholarship, theory and empirical inquiry); and

iii) Changing realities, beliefs, values and ideologies of society.

Based largely on the work of German and French theoreticians (Habermas, Bourdieu, Foucault) – but with deeper roots in European and American cultural sciences and epistemology – a movement of emancipatory critical pedagogy has sprung up. It has important implications both for curriculum (as cultural construct) and pedagogy (as transaction). These implications have yet to be adequately addressed within the educational mainstream, although they have attracted a considerable literature.

It is in the designing of the curriculum, the planning of its implementation and its practical expression in the teacher-learner relationship that we find the visible expression of the core values and organised learnings of society in the setting of the school. The curriculum is increasingly being recognised as a selection from the culture, a mode of addressing the culture, and a mediation of cultural experiences and processes in a living situation where teachers, students, parents and community interact on a common project. Not least for reasons of public accountability, all this must be accessible through documents and an open-door policy by schools.

As indicated above, culture may be treated in the classic terms of bodies of established knowledge to be communicated or as something more flexible and responsive to contemporary life. Educators have sometimes been slow to examine the difference. In recent years, ultraconservative groups in different countries, from the United States to Iceland, New Zealand, Australia and Great Britain have realised the political significance of what can be termed the cultural approach to the curriculum and there have been, and are likely to continue, confrontations especially in relation to social, scientific and moral areas of the curriculum.

Procedures for handling debates and pressures of this nature seem to be lacking, as does an adequate form of discourse in which to address them. As the curriculum becomes increasingly an arena of public discussion, educators will need to develop more robust educational reports and curriculum guidelines.

Curriculum, an Instrument of Change and Renewal

Whilst it cannot be said that across Member countries there is a full realisation of the socio-cultural import of curriculum in the way just outlined, there can be no doubt that this realisation is growing. It is triggered and assisted markedly not only by the pedagogical sciences but by the attention being given to the economic and social roles of the school. This in turn is very largely explained by major social changes of our time – the growth of the service and finance sectors; the emergence of the new knowledge-based technologies and industries; and the democratisation movements of the 1960s and onwards.

Everywhere it is recognised that the curriculum must equip young people with a wide and diverse range of skills and understanding. But the moral and citizenship aspects of curriculum are seen to be equally important since the new society is a society of new interpersonal relationships, new social organisation and structures, and new uses and applications of knowledge in the world of work. Inevitably, therefore, the design of classroom instruction is but an element in the overall curriculum process. The essential task in educational reform is to ensure that a wide and varied range of desirable learning experiences in the school are so planned as to contribute to successful student learnings, and

appropriate learnings for all students. As to just what is "desirable" and what is "successful" and on whose say so, there is room for considerable debate and debate is certainly occurring.

To understand the practical applications and outcomes of the broader concepts of curriculum would require detailed studies in every system. There is no agreed set of instruments for such studies and there are too many gaps in our knowledge for comfort. It is necessary to take into account both the social, scholarly and pedagogical factors already mentioned and the processes of change in particular settings, that is, the realised curriculum. The principal sources of such information seem to be:

i) Surveys, including surveys of student performance;
ii) Reports by experts, consultants and teacher educators, and
iii) The in-depth ethnographic studies that have become popular in academic circles.

It would be a mistake to examine only those national situations where change is swift and pervasive. The German report, for example, provides a fascinating glimpse into the inner dynamics of a highly successful and stable education system. Curriculum in Germany appears, in this report, to function rather as Plato hoped it might in his late, and highly conservative dialogue *The Laws*. It is "a codified challenge", a means whereby "the elder generation determines which parts of the common heritage will be transmitted to the following generation ... A steering instrument of the State". Yet there has been something of a cultural revolution in Germany in conceptualising the curriculum, hence in defining the social role of schooling.

Traditionally, until the *Bildungsreform* period of 1965-1975, syllabus models dominated. In the words of the German report, "The underlying philosophy of the *geisteswissenschaftliche Pädagogik* was that *Bildung* (education by values) was to emanate from the valuable content of learning." This was challenged in the 1960s by the curriculum specialist, S. B. Robinsohn who, influenced by the curriculum reform movements in America and England, fostered a new type of syllabus which was inherently technological: goal-centred, with replaceable contents and specific guidance to teachers on teaching and evaluation procedures. The theme was technical efficiency achieved through clarity of goals and perfection of methodology. In brief, this is the techno-industrial model of curriculum development. Change is a planned process conducted by experts.

Since the 1970s there has been a counter-movement to "regain education" (*Wiedergewinnung des Erzieherischen*) emphasizing once again the embedded norms and values of the traditional fields of knowledge and culture. Curriculum is thus once again to become a means of inducing the young into the predetermined culture of the group, and moral and social needs are to be emphasized. But the clock cannot be turned back and the curriculum debate has moved beyond both the legacy of von Humboldt and the technocracy of the 1960s. There has been in Germany a radical reaction both to "regaining education" and to Robinsohnian technocracy, the so-called *Antipädagogik* which treats education and hence the curriculum as a cultural impost on the individual, a manipulatory attack on freedom. It scarcely needs saying that *Antipädagogik* is a small, minority movement in Germany as its parallels are in other countries. Yet it is a useful reminder that neither traditional conservatism nor modern rationalistic concepts of curricula have exclusive rights in the con temporary debate about concepts and directions for change. This is evident if one turns from the official documents in several countries to the professional literature and the media reports and commentaries.

Crucial Curriculum Distinctions

Short of exploring the upper reaches of the conceptual discussions of curriculum, some crucial distinctions are needed: curriculum as: *i)* official text or as map of students' learning experiences; *ii)* instrument of state policy or artefact of educational sciences; *iii) sui generis* or function of educational structures at the system level; *iv)* consensus-making or consensus-breaking.

Curriculum in respect of the first of these distinctions is often conceived as official text, usually a document which, in the case of Norway, the Netherlands, France, Japan and other countries, and in the words of the Norwegian report "outlines the aims, goals and objectives of the school, presents a summary of the subject areas to be covered and the content of the teaching, and points out ways in which teachers and pupils can work with the various subjects and themes to be covered". All countries, at the national or state/provincial level now have such documents which constitute a framework, guidelines or directives for school action. Curriculum has also been treated in the tradition of progressive pedagogy as a kind of map or chart of students' learning experiences which may be determined at any level from the individual classroom to the national ministry[14].

There is a definite if not uniform trend towards comprehensive guidelines. This can only be understood as a demonstration of the increased interest of governments in the role education has to play in advancing government priorities, especially in the economic and social sectors. In Australia, for example, the federal Minister of Employment, Education and Training has issued a paper indicating his government's intention, in association with the states, to provide a national curriculum framework[15]. In the case of New Zealand, there has been a succession of significant inquiries, consultative documents and national reports dealing respectively with the overall direction of the curriculum and school administration. While the former gives to schools and communities a major determining role and imparts a strong flavour of progressive pedagogy, it is also quite emphatic about the need for a nationwide common curriculum. The latter provides the complementary mechanism, for example in its emphasis on Review and Audit Agencies to monitor local decision-making[16].

In the New Zealand reports, there is evidence of communities and governments seeking ways of redistributing power in a new system where responsibility for curriculum decisions is shared by several partners in a well-knit system. Despite concern expressed about the impact of pressure groups in the present centrally-directed arrangements, it seems likely that the new system will provide just as much scope at the local level.

The New Zealand trend is also towards a degree of privatisation in educational support and resourcing and away from the public authorities (and the public exchequer), a phenomenon observable in several countries at present. Thus, in France, the United Kingdom, Australia and the United States and Canada there is a growth in the private consultancy business. This trend should itself be monitored to ensure that educational as much as efficiency criteria are observed. Semi or quasi privatisation within a government regulatory framework (the curriculum text or guidelines) seems likely to increase, not only in countries with a strong private school system.

The second distinction drawn above is between the curriculum on the one hand as a definite instrument of state policy – whether for government or private schools – whereby broad social and educational objectives are instantiated in school practice, and on the other as an artefact of cognitive sciences, scholarly research and the professional decisions of educators working with children, parents and others. Although there are many examples of the latter, there is the ever-present tendency for the State to play an increasingly dominant role *vis-à-vis* professional and academic interests.

The case of Japan is interesting since there is a move "from unity to diversity" within the curriculum but, at the same time, it is, according to precedent, a national instrumentality (in this case the National Council on Educational Reform) that is setting forth the new directions. This tendency is paralleled in many countries: decision-making is dispersed but overall control rests with the State which is repositioning itself to achieve the broad system goals already discussed. The effect, in respect of specialists in educational sciences and pedagogy and the classroom teacher is, step by step, to loosen the educators' grip on education. Beneficial as this may be in a transition phase, it points to the need for a renewed effort in professional development so that teachers' new roles are well performed.

The third distinction we have made has to do with the placing or locating of curriculum within the general frame of reference or code of educational policy and planning discourse. By this is meant the recognition, in several countries, that in the sequence of educational reform, curriculum development is seen as a natural, inevitable or necessary consequence of the structural changes and the expansion of education of the 1970s.

Curriculum is in this sense increasingly being shaped and modified as a system- (or structure)-dependent variable. Curriculum change is perceived to be dependent on changes in other sectors of the education system, e.g. teacher education and terms and conditions of service. Yet, there is little evidence from the country reports or other sources of large-scale curriculum development work or reconceptualising actually taking place. Is this, then, in disguise the familiar distinction between a rhetoric or an invocation of change and on-the-ground recapitulation of customary practice?

There appears to be a trend to debate the curriculum, to call for major changes in the content of education and in teaching and learning and to redirect policy but not to systematically and comprehensively redevelop curricula at the levels of school and classroom to meet the new needs. On such a reading the curriculum debate can have something of a incantatory tone.

From another standpoint, there is a dilemma in that, while governments and leaders in the education profession may and commonly do recognise the need for rethinking and replanning curricula, financial stringencies, resulting in larger class sizes (as in Ireland) or in reduced funds for discretionary development works and resources (as in the Netherlands and most other countries) are real constraints. It is important to note exceptions, such as the Japanese development of distinct new subject areas (discussed below) and the large-scale development work, e.g. in France, Australia and Great Britain, in prevocational and vocational education. What is not occurring is the across-the-board project development characteristic of the 1960s. That is understandable but much less so is the apparent dearth of alternatives which, when combined with the array of guidelines and directives and a decline in teacher in-service education in a number of countries, creates a serious development vacuum.

Finally, we notice a distinction between curriculum as a deliberate effort to reinstate a national consensus about educational goals and values – as reflected for example in the American endeavour to build a consensus around a felt or declared need to overcome crisis and in the New Zealand review process – and curriculum as an assertion of a point of view about education and social change which the government of the day is prepared to affirm even if that means the possibility of increased divisions and differences within the country. Great Britain is perhaps the most conspicuous recent example of this. But it is not the only one. In the Netherlands, the responsibility for advising on curriculum reform was given to the Scientific Council on the grounds that a consensus of educational views was impossible.

Chapter 4

INTRODUCING OR STRENGTHENING THE CORE CURRICULUM

One of the most striking trends we are observing in the curriculum field is the renewal of interest in a firm and clear national or system-wide framework: of goals and objectives; required subjects or subject areas for study; guidelines or procedures for assessment and a range of monitoring and accountability measures. Core curriculum is a widespread phenomenon. It is a logical outcome of the trends and movements outlined in the preceding chapters. But what does the term "core" connote in curriculum debate and school practice?

Antecedents

Changing assumptions about the nature and content of core curriculum parallel the vast expansion in the early to mid-twentieth century and onwards of our national systems of public education. This is most noticeable at the secondary school stage where the rapidly increasing number of students of much greater diversity than hitherto was, *inter alia*, a challenge to the classical model of the curriculum and pedagogy. This model presupposed a common body of knowledge, to be studied by all students, who would be taught by whole class methods and usually in a didactic fashion. Of course, there were exceptions, but the essential point is that the core curriculum meant the whole curriculum for all students.

The model collapsed with the changes that have already been outlined in this report. The question then arose as to whether there is any common body of knowledge, values or skills that, regardless of student aptitude and background, should or could form the nucleus of the variety of curricula that have emerged during recent decades. In fact, all school systems do have some prescribed core learnings although they are usually differentiated for purposes of teaching.

It is to the American literature that we must turn if we wish to trace the evolution of this process and the changing meanings of the term "core". Historical exegesis is not to our purpose here, but mention should be made of the principles that have informed core curriculum thinking. These include the beliefs that subject matter can be integrated through grouped or interdisciplinary studies; that there is a common set of social values and democratic principles that all citizens should imbibe; and that the core curriculum can be stated as a set of learning experiences and hence made personal to each and every student[37].

These aspirations for an integrated core of socio-cultural values and meanings and a new pedagogy were to be deflected, in the United States, by the post-Sputnik drives towards a subject-centred core curriculum[38].

Current Meanings and Approaches

First, "core" as widely understood across Member countries signifies system-wide (whether national or state/provincial) control and direction of defined, essential curriculum elements to meet national goals and objectives. Second, it signifies emphasis on predefined subjects or subject matter, structure and organisation in the curriculum. Third, it encompasses not only a defined content to meet specified goals or objectives but attainment standards and means of assessing them. Fourth, the approach being taken to core, with an insistence on compulsory subjects and standards, is a reaction to the fragmentation of the curriculum resulting from the "cafeteria" approach whereby students assemble curricula by combining their choice of the subjects that please or suit them. Fifth, there is a belief in some countries that the core curriculum movement is a covert assault on innovations in curriculum and pedagogy such as integrated studies, controversial subject matter in the social, cultural and environmental areas, group work and inquiry-based learning.

There is little that is novel in the core curriculum movement. In the educational literature core curriculum has an ancestry dating back to antiquity. In all periods of history efforts have been made to analyse for purposes of schooling the fundamental elements of knowledge and understanding: the kinds of knowledge that seem to provide foundations for further learning; the intellectual and practical skills that serve as tools; and values and attitudes that seem to be of most worth to individuals and society. Inevitably, groups with power in society – whether church or state or professional bodies – will seek to control teaching and learning and the core curriculum is an obvious mechanism.

Since interest groups are involved, and value judgements enter into all these matters – and scientific knowledge of learning processes and of knowledge itself is limited – there always has been and there remains legitimate ground for debate about the core. Moreover, until recent times the debate did not have to take into account universal, compulsory schooling. This has added a dimension which is particularly evident in present endeavours to define required learnings for all, together with more advanced and specialised pathways for individuals and particular groups. The reform of examining, assessment practices and indicators of learning performance are also affected by extended participation in schooling. Consequently, the core is under great pressure.

In several countries where a nationally-prescribed core has been a feature, reviews have recently occurred of the overall scope, shape, content and organisation of the core to meet national priorities and needs and to respond to the changed context. Striking examples include Italy (elementary schooling), Turkey (secondary schooling) and Japan (elementary and secondary). Specific trends are outlined in the following chapters.

On the other hand, where there has been a tradition of local decision-making and where there has been variety or, until recent years, perhaps a slackening of commitment to nationally-declared curriculum priorities, as in the United States, England and Wales, Australia, New Zealand and Canada, there is now a very strong revivalist movement. The core curriculum in either a stronger or weaker form has as a consequence become a major educational priority.

In Canada, "essential learnings" are being defined, computing courses in secondary schools increased in number, and stricter requirements introduced for the award of the high school diploma. At the level of subjects, core curriculum is now defined in all Canadian provinces at both elementary and secondary levels to include "language arts, mathematics, sciences and social studies". Compulsory studies are likely to be incorporated soon. It is emphasized, however, that subject labels are not enough in defining the basics. Increasing

attention is being given to skills in handling information, problem-solving, critical thinking and so forth.

New Zealand has maintained a required core of subjects in both primary and secondary schools ever since the Second World War. However, this has been enlarged and varied – its critics would say diluted or fragmented – as a result of additions and variations which include health and peace education, computer studies, environmental education and others. The recent curriculum review has laid down principles and guidelines and indicated areas of study and approaches to teaching but has stopped short of specifying subjects and time allocations. The New Zealand authorities indicate that existing specifications on these items are being redrawn in light of their review. Moreover, the review draws the final years of secondary education firmly within the core curriculum net.

New National Endeavours to Define (and Control) the Core

In countries that are moving to affirm or strengthen a clearly-defined, subject-oriented core curriculum, there is little if any disagreement over the desirability of facilitating students' access to knowledge and learning process skills (problem-solving, reasoning strategies, cognitive maps, co-operative and communication skills, etc.). The debate centres on whether knowledge access and process skills will be enhanced or submerged by the changes under way.

Great Britain has taken the unusual – for her – step of introducing legislation to specify the core areas and to empower the Secretary of State for Education and Science to monitor implementation, including the use of nationwide tests of student attainment at 7, 11, 14 and 16 (General Certificate of Secondary Education replacing the separate antecedent examinations). A set of specified subjects is required of all students during the years of compulsory schooling: mathematics, English, science, history, geography, technology, music, art, physical education and a modern foreign language (the latter only for students from 12 to 16). Effectively they constitute the core although that term is formally reserved for the three subjects of English, mathematics and science. There are radical delegations of financial and managerial decisions to schools: a neat reversal of the previous practice whereby the schools tended to control the curricula (allowing for the end of secondary school exams) while the outside authorities determined the budget details.

In the United States, while it is not within the power of the federal government to legislate a national core along these lines, the wave of national reports commencing in 1981 argued for a broad common core of studies for all youth and sketched their outlines[9]. By no means the first of such proposals, this series of documents nevertheless attracted interest and support of an unprecedented kind. *A Nation at Risk*, for example, advocated "five new basics": English, mathematics, science, social studies and computer science. Of this five, only the last was a relative innovation, but the real novelty lay in the emphasis on systematic, continuous study of discrete subjects, all of them to be compulsory. Many United States school systems have moved in this direction.

The country reports for this study and other sources do not produce commensurate data sets on required subjects, time allocations and so forth, so systematic comparisons across countries cannot be incorporated here. The next phase of CERI work on trends in school curriculum includes a study of core trends and issues. More comprehensive and detailed data should be available then.

What is so different about the new advocacy of core? Most obvious in the United States has been the emphasis on standards of attainment in basic subjects to be achieved through:

- Greater concentration on key concepts
- Orderly knowledge structures
- Cognitive and practical skills
- Greater effort within schools by teachers and students alike
- More structured home study
- An explicit interest in cognitive learning strategies
- Evaluation and application of knowledge
- More rigorous, comprehensive and frequent testing of learning outcomes at all levels from individual schools to the whole nation.

In applying this agenda, the American public authorities and a number of private and professional organisations have embarked upon extensive critiques, reviews and developmental programmes in the humanities, sciences and mathematics. There has been a substantial development programme in assessment and evaluation and this has generated fierce controversy. As many commentators have pointed out, there can be a negative impact of this kind of activity upon the broader educational goals and values that have been widely promulgated across the nation. The American authorities are not blind to the dangers:

> "Many educators are mindful that a great deal of instructional time has been diverted to testing. Practitioners, policy-makers, and researchers have all begun to question the appropriateness of the instruments used to gather the desired information, and the utility of the information once it is gathered."

The debate in Great Britain over the narrowness of the definition of the core and the move towards nationwide testing in the "basic core" of English, mathematics and sciences continues as the government proceeds from plan to consultation to legislation to implementation[40]. This debate brings out a significant issue about curriculum and pedagogy. Priorities by their nature are translated into specific cognitive and affective changes and defined skills. These are separated out from the potentially much wider range of student learnings to which curriculum and teaching should minister.

It would be advisable for governments to examine more closely the implications of the inevitable narrowing of the curriculum that results from concentration on a handful of "basic" subjects. Selections and choices must be made, and there are necessary economies of provision to achieve. But there is a risk of retrogressive reforms, with the solutions of the 1980s and 1990s referring to the problems of the 1960s and 1970s. It is not clear how the national drive towards compulsory subjects and testing will avoid a stultifying rigidity in teaching and learning or achieve the flexibility, independence and adaptability sought in the modern workforce or the cultivated interests needed for a leisure society. Studies in the history of pedagogy have indicated how difficult it is to achieve the experiential, student-centred learning of the kind that is needed[41].

Core as an Accepted Responsibility of Central Governments

In many Member countries, indeed in all except some of the Anglo-Saxon countries, the concept of a nationally- or regionally-defined core curriculum is already quite familiar.

There appears to be little interest in the question of whether or not there should be a government-determined core of subject learning required of all students. Rather, concern focuses on changes in its scope and context, the parties that participate in its determination, and procedural matters arising in the field of action. These include the definition of objectives, ways of ensuring compliance, procedures for assessing student performance and regional and local decision-making, support services, etc. Extensive developments in testing procedures, with national samples taken at every level of schooling, have been occurring in France for several years. This is but one example of such development.

In Finland, since the early 1970s there has been developmental work on core content to determine the essential and discard the peripheral. As mentioned above, the Finns are concerned about the undue weight given to mere information gathering and regurgitation. Accordingly, a major project, Formal Aims of Cognitive Education/Instruction was commenced in 1985 to find ways of developing students' thinking, problem-solving and intellectual curiosity and creativity within and across the core subjects. The Finnish cognitive project is not subject-specific, but addresses cross-subject learning process skills and cognitive strategies.

Development work on core subject areas, while still subject-related, illustrates a growing tendency across the OECD area. Systems are aiming to take a broader view and to clarify goals. In relation to them, efforts are being made to elaborate knowledge structures, cognitive strategies and style, learning processes and transferable skills such as problem identification, problem-solving and ways of applying and utilising knowledge. Examples are provided by the Netherlands, New Zealand, Germany and Norway. These emphases entail new roles and capabilities among teachers but it must be reiterated that there is no commensurate growth in provision and facilities, particularly for in-service education, which in the 1960s and 1970s were generally accepted as a necessary corollary of curriculum reform. The newer policy and planning approaches will not quickly take root in the schools unless this is remedied.

Addressing New Needs

So far, the discussion of core has centred on the idea that fundamental and basic learnings required of all students are most readily expressed as a set of compulsory subject learnings in the framework of the school week and year. This does no more than acknowledge the way core curricula are frequently described in policy guidelines and regulations, and presented in school timetables. From the discussion of general curriculum concepts and approaches in the preceding chapter, it is evident that there are serious limitations to this approach. These are recognised to some extent where the specification of "essential learnings" is not subject-bound but presented in terms of general understandings, critical thinking skills, values, intellectual flexibility and so on. Mention has been made of the Canadian provinces and the New Zealand approaches to the matter and there may be a trend emerging, but as yet it is submerged within the concept of "core" defined as a set of discrete, timetabled subjects.

It is becoming increasingly obvious that more creative thinking, including more professional participation in policy studies, is required to clarify desirable directions in core curriculum planning and development. There are too many moves in Member countries pointing towards a whole or cross-curriculum approach and to the need for fresh initiatives in pedagogy for this rather old-fashioned subject-centred and subject-timetabled curricu-

lum to continue. It is the press of specialised and professionalised knowledge in higher education that has reinforced curriculum conservatism in the secondary schools and the subject-centred regime of the upper secondary stage has similar effects lower down. Further changes will occur as a result of the drive towards vocational preparation in secondary schooling. Many of the pilot projects in this area are breaking the subject mould.

Are subjects to be abandoned, then? Certainly not. The point is, as John Dewey long ago pointed out, to draw upon subjects as a *resource* in the design of curricula and so to utilise and combine subject matters as to match the interests and experiences of learners and the socio-cultural world of which they are a part.

There are positive signs of a coming change. Thus, as has already been shown, the trends in contemporary educational policy development and the current concepts of curriculum include, but are not confined to, areas of subject knowledge. A comprehensive analysis of core in practice would incorporate both learning processes and learning environments, yet the specifications of core that are commonly made either deal scantily with these dimensions or, in the case of the second, frequently are completely silent. This is, as much as anything, an indication of the need for a more contemporary and exact language.

As teachers know very well, what education authorities really regard as the fundamental and basic learnings is not necessarily those specified in up-front objectives and descriptions of what is to be taught. Their real concerns are to be found in the form and content of student assessments and in the kinds of monitoring that systems deploy in their quest for compliance. There ought to be, of course, a close correspondence betwen the two. This is more clearly the case in some systems (e.g. Finland) than others. The content and style of performance indicators, as they extend across education systems, will be most revealing. Teachers will teach to the requirements of the assessment system and students will learn accordingly. It is therefore of the utmost importance that the curricular and pedagogical reforms that are being sought should be fully reflected in the assessment, monitoring and accountability regimes.

We need to consider in a little more detail the trends in assessment – which seem to indicate that much of the current development work in education is occurring in that area (for example in the United States, the United Kingdom, Canada, the Netherlands, Sweden and France). Evidence on school failure is growing as a result of monitoring work and forms the substance of major debate in some countries. In France, for example, an evaluation scheme for elementary education *(dispositif d'évaluation de l'enseignement à l'école élémentaire)* was launched in 1978 and a similar scheme for secondary school monitoring in 1980. Attention therefore needs to be paid to the devices being put in place to ensure compliance: accountability reports, the construction and application of performance indicators, monitoring and evaluating by the inspectorate and so on. Studies already carried out within the OECD on "Quality", "The Inspectorate and School Improvement", and "Performance Indicators" are highly relevant and informative.

A crucial task in the core debate is the identification of the values, disciplines, areas of knowledge, skills and themes deemed to be essential for the modern world and for today's learners and tomorrow's citizens. These must not only be taught – they must be learned, and the effective translation of nationwide core requirements into individually successful and satisfying learning for *all* students remains one of the great unfinished tasks in education. The issue of the scope, content and organisation, teachability and learnability of the contemporary core of the curriculum requires more rigorous analysis than it generally receives. Supporters of the move towards the kind of broad compulsory core curriculum which is to be found in all school types in the German system question what they see as the looseness and mediocre overall standards of those systems which have encouraged great

diversity, confining the most rigorous study requirements to a relatively small minority. Others, mindful of the wide range of student aptitudes, abilities, interests and socio-cultural backgrounds, are sceptical about the push towards a tough-minded academicism. Yet others see the shape of the core in terms more of social issues and life skills, as did the American advocates of "life adjustment" education in the 1950s. There are, as a consequence, serious tensions in the general shift towards a core curriculum for all students, in all Member countries. They will not be resolved merely by the issuing of policy guidelines, frameworks or directives or even by legislation.

What is of most interest, educationally, in current debates about core curriculum are the attempts being made to introduce new forms and organisation of knowledge into the core itself: a reconceptualisation, in some measure, of basic and fundamental learnings. Noteworthy are the conceptual strategy approach adopted in the new Italian primary curriculum and the new Japanese concept of core as providing the basic building blocks of universal, lifelong learning. In Japan, there is a strong reaction to material affluence, hence a questioning of the effects of affluence on children, and a reassertion of humanistic values. *Seikatsuka* – the merging of elementary science and social-environmental studies, in the elementary school – is a bold new move. Overall, a brave effort is being made to find a central place in the core for creativity, logical thinking, imagination, inspiration, motivation to learn, enjoyment of learning, pleasure of accomplishment in face of the "desolation" of contemporary Japanese education, and society.

Other examples of innovations within the core are information technology – described as the first real curriculum reform for fifty years in France – the prevocationalising of the secondary curriculum in the United Kingdom, Ireland, the Netherlands, Finland, the United States, Turkey, France and the primary school reform proposals in France. These themes will not be further discussed here, however, since they will be reopened in later chapters of the report and considered in more depth in the core curriculum case study at a later stage in the OECD's work programme. Suffice to say that there is a welcome beginning of the necessary rethinking of the overall organisation and content of the core, which is developing alongside a reaffirmation of more traditional approaches.

We turn now to a brief consideration of curricular and pedagogical trends that are specific to the elementary and secondary phases of schooling. Since the general discussion thus far has encompassed both of these phases, there is no point in repeating matters already dealt with. Attention will be drawn to a selection of developments that have been highlighted for one reason or another in the country reports.

Chapter 5

DIRECTIONS AND IDEAS IN THE ELEMENTARY STAGE OF EDUCATION

The phase of elementary schooling normally marks the beginning of compulsory education and typically follows that of the voluntary preschool or kindergarten. Just as the voluntary years of upper secondary education are becoming part of the educational norm, so is preschool in many Member countries becoming the norm for all children. In this report, however, we are concerned with the compulsory years. The elementary school is entered usually at the age of between 5 and 6 or 7 and its duration ranges for six to eight years to ages 11/12 to 14. Most common is a 6:3:3 pattern (elementary:junior secondary:upper secondary). Traditionally, elementary schooling was a period of common, basic schooling. With the lengthening of the years of schooling, whilst that feature has not noticeably changed, there is a further spread of basic education including a common core of studies in general education into the secondary years as well.

A Quiet Revolution?

The country reports demonstrate that it is as much or even more in the elementary as in the secondary phase that we find evidence of significant rethinking and restructuring of the curriculum. Is there a quiet, unheralded revolution occurring in elementary education? Care is necessary in drawing this conclusion from the country reports. Much of the information and discussion in them of content, including the general debate on core curriculum, infers secondary schooling even where the secondary stage is not specified. Even so, there is evidence, particularly for France, where the Ministry of Education has prepared a Prospective Plan, and Italy, where a team of consultants has done likewise, that creative intellects have been at work on the primary school curriculum. It remains to be seen how far and with what measure of success plans recently developed will be carried to fruition in school practice.

As a generalisation, it seems that at the elementary stage there are four factors, over and above the perennial and inconclusive debate about basic skills, which are significantly influencing the direction of curriculum and pedagogical reform:

i) The pace at which the information technology revolution and the computers in schools movement progress;

ii) The widespread consensus that broadly-defined cognitive skills should be cultivated across the whole curriculum;

iii) Growing public awareness of the precariousness of human life on the planet and the need for schooling to foster in children value awareness, environmental and aesthetic sensitivity and various other personal development/culture development initiatives;

iv) The drive towards more structure and coherence in the curriculum, more rigorous assessments, accountability for outcomes and more formal procedures in teaching.

These are global generalisations drawn from diverse sources and applied across some seventeen countries, each with its own distinctive education system. There are, naturally, exceptions and differences of emphasis. Yet these four factors do indeed recur and, on the evidence of the country reports, one or more of them feature in every country participating in this study.

New Directions

Elementary education in some countries has been comprehensively reviewed and is being replanned. Perhaps the most striking of the plans has been completed in Italy where the government called in a varied group of prominent public and cultural figures to offer advice. The resultant proposal underlines the need for universal cultural literacy. This is to be attained through systematically organised experience in such "structured forms of knowledge" as the linguistic, mathematical, spatial, musical and pictorial. These are organised as "a repertoire of cultural hierarchies and references". A core comprising nine equally weighted cognitive areas is proposed to be introduced into the school system over the next five years. The focus is the child as a cognitively active individual. The principal function of the school is to be cultural mediation and the teacher is to lose the images of artisan and schoolmaster as new and demanding roles in cultural transactions and cognitive formation are envisaged.

Evidently, dramatic organisational developments, including training and re-training, will need to occur if the Italian plans are to materialise in the large-scale changes that are proposed. Some sobering comments on these points are made in the Irish report where it is stated that reform proposals, not dissimilar to the Italian plans in their far-sightedness, in that country in 1971 encountered powerful resistance in the schools themselves and among some teacher groups.

There will be considerable interest in the manner in which the Italian reforms are pursued, with the benefit of two decades of experience and research that were not available to the Irish authorities. Whether or not the goals of the reforms are achieved, the proposals themselves are an elegant demonstration that cultural literacy goes far beyond basic mathematics and language skills, and the narrowing confines of parts of the core curriculum movement.

In Great Britain and the United States educators are concerned to ensure that the strong official drive towards "the basics" and testing are accommodated within a comprehensive, child-centred curriculum. The ensuing debates promise to be lively, as is indicated by the French report where primary education is said to be "the subject of deep debate and must continue to be so, following the publication of the Prospective Plan prepared by the Ministry".

The terminal function of the elementary school has virtually disappeared with the extension of the system of compulsory schooling and the achievement in all Member

countries of large-scale secondary education. It is the role of primary schooling preparatory to secondary schooling that receives most attention in the French report, leading to the affirmed need for a differentiated pedagogy in a situation where the whole society is being schooled.

There is a trend in several countries towards incorporating the elementary phase within a continuous common school (or a kindergarten to year twelve curriculum continuum). The Americans and Australians use the glib phrase "K-12 curriculum". There is, however, a definite elementary or primary education "culture" which reflects the historically different origins of primary and secondary schools. It is reinforced by teacher training and selection and, more subtly, by the impact of child and developmental psychology (e.g. Piaget's influence) to which current interest in cognitive strategies in learning is heir.

Many of the most interesting recent curriculum initiatives have focused on the primary stage of schooling. Some of them move against the trends towards a subject-defined core curriculum with strong state controls exerted through course requirements and assessment procedures that have been outlined in the previous chapters. The trend in some countries towards mainstreaming of students has been a salient feature of school organisation at the elementary as well as the secondary stage. The wider range of abilities, attainments and interests now to be found within the single school or classroom presents very real challenges to teachers: how to respect and build on individual differences, and meet widely-varying individual characteristics of children within a common school and classroom organisation and a common curriculum.

The pedagogical challenge is acute. The new requirements seem to be fostering a fresh interest in the individuality of the child and the distinctiveness of learning needs and processes. There is evidence of a widespread feeling among teachers that the changes have been too abrupt, too little prepared for, and inadequately supported. It is difficult to find evidence of continuing and substantial development of innovative pedagogy.

The potential of new learning technologies is considerable but their exploitation has been patchy due not least to the shortcomings in software and resource limitations. Very few systems are untouched by significant demands: for the further training of teachers, large-scale system development work, learning materials, technical support, funding new equipment and effective evaluation of costs and benefits of the new technologies. Nevertheless, their spread seems inexorable and their applications are being felt across the curriculum although still more in the cognitive process areas.

The long-standing progressivist-inspired debate about subject- or child-based teaching continues. It seems a pointless exercise, since in educational (as distinct from media) circles the "debate" has been converted into a dialectic and bracketed within broad-based curricula proposals which endeavour to develop all facets of the child. There is a renewed interest in the relationships between structure of knowledge and cognitive strategies in learners, in the moral as well as the intellectual domain. These trends are illustrated in the Australian, British, Italian, Netherlands, New Zealand, United States and Irish reports and hinted at in others. Interest has shifted to the nature and place of an enlarged concept of "the basics". In Canada, there is considerable interest in how the basics should be defined and what they are to include. In general, weight is being given to language, mathematics, science and manipulation of the computer.

There is, too, a move away from the either-or dichotomy in the matter of student grouping so that classroom organisation is more clearly related to the purpose and the nature of the learning task. Differentiation by traits (intelligence, aptitude), it is generally believed, should be kept to a minimum at the primary stage. Individualisation within the

age grade is being fostered. Australian state systems provide many examples of both horizontal and vertical, small- and larger-scale grouping practices.

Canada, in keeping with other countries, is experiencing a strong drive by early childhood educators to reduce the formalism and rigidity of the first two grades and to incorporate more of the freedom and flexibility of kindergarten and preschool. There are moves in several provinces to loosen the curriculum so as to enable children to proceed at their own pace and a resurgence of interest in formative as distinct from summative evaluation. One of the more promising trends is the interest by parents in preschool education and the transition from preschool to primary school. Likewise, in Australia this interest is well demonstrated. The French authorities recognise the problem of grouping, combining and differentiating children at the elementary stage for different purposes. The heterogeneity of the pupils necessarily means that a pedagogic method that differentiates among them be applied – one which relies on the continual evaluation of the pupils (reports, analysis, regulation of teaching method). Here, as elsewhere, responsibility for monitoring, analysis and evaluation are requirements of the teacher.

Reform in the Balance

There is a need to reconcile the individualisation of teaching and a flexible pedagogy with system-wide requirements for age-related content and testing. Action is likely to sharpen debates and to complicate "the basics", particularly in countries such as Great Britain and the United States where "continued assessment of pupils" is increasingly taken to mean nation- or system-wide testing. It is oversimplifying the issue to regard the subject matter requirements and the testing as agreed ends, with room for difference on the means of implementing the curriculum and preparing for the tests. There needs to be, at all levels of decision-making, a readiness to adopt and accept flexible approaches in pedagogy and, again, a softening of the distinction strongly made in the 1960s between formal (didactic) and informal (flexible) teaching.

It may well be agreed that such a reconciliation is not only required, it is occurring. But it would be unwise to minimise some counter-indications. They are to be found in many countries – in a fairly muted form in some, Norway for example. Especially in New Zealand, Australia and the United States, however, there is a strident note in the back-to-basics movement and in fundamentalist criticisms of laxity in moral and ethical standards, and teacher-student relations. This is a reminder of the prominence given by the critics to "progressivist excesses" in the 1960s and 1970s. It is also at the primary stage that the new testing movements are making their first impact upon schooling.

The debate over primary education is said to be mild and sporadic in some countries (Finland, Sweden, Switzerland, Germany). In others (the Netherlands for example) the research evidence suggests a high degree of conservatism and public satisfaction, whereas opinions expressed in Parliament and the press are to the contrary. It is the latter that appear to affect action, particularly the government's intention, which has gained support, to determine specific outcomes of primary education by law.

From the country reports submitted for this study, it appears that two systems having recently reviewed the primary stage are now proposing most interesting and far-reaching proposals for new or modified directions in curriculum and pedagogy at the elementary stage. The Italian proposals have already been mentioned. Japan is the other country preparing to implement major changes.

In the case of Japan, as we have seen, the authorities are proposing to change education, including elementary education, from its highly competitive, conformist and materialistic character through an orientation towards "affluent humanity", individualism and internationalism. Moral education is to be revitalised to become a means of addressing behaviour problems in school as well as assisting in a broader character formation. As noted in the preceding chapter, a new subject *Seikatsuka* (literally "living") is to be added to the core of the elementary school through a combining of science and social studies. *Seikatsuka* will require fewer hours than those available for science and social studies separately and Japanese language will be the beneficiary in the first two years of schooling. Greater emphasis will be given to the teaching of English, and to integration of subject matter in the curriculum. Pedagogical changes proposed at the primary stage include more self-directed learning, and teaching to encourage sociability, creativity, thinking processes, and decision-making.

The approach adopted to the reform of primary schools in Italy has been no less comprehensive and, as in the case of Japan, was initiated at the highest levels of government through the creation of a group of experts over and above the normal Ministerial committee and advisory structure. There is refreshing evidence in both systems of a belief in the fundamental importance of the elementary stage. Bold new proposals go beyond the received wisdom regarding what children need in their formative educational years.

Both reforms are, however, illustrations of the essentially "top-down" approach to change which is now all but universal. It is difficult to avoid the conclusion that there is a real risk, if such approaches are not complemented by equal attention to the processes of change within the schools themselves, of a widening gap between policy directions and the classroom reality. This is not to suggest that the only worthwhile developments come from within the school. Such is far from being the case. Yet unless the teachers, parents, local communities and students are themselves actively engaged in the reform process, change will be extremely slow and very uneven. The reports from Australia, New Zealand, the United States and Great Britain, among others, indicate that education authorities are alert to this need. What is not clear, however, is that appropriate action is occurring.

We do know that in an era of generally stable or declining educational budgets in several systems, resources are being withdrawn from support and development services and that teacher education is being trimmed. The range of "top-down" requirements, when combined with expectations in the schools and communities, underlines the problem.

Specific demands appearing across many systems include:

- Well targeted performance criteria and standards of student attainment defined on an age-performance basis (tests are costly to develop and to administer; training is required and additional hands are needed);
- Creative, active, self-motivated, enterprising learners, who are well rounded, balanced, socially acceptable students capable of proceeding smoothly into secondary schooling (large classes and limited materials and equipment, by contrast, invite where they do not compel teachers to adopt whole-group, text-based instructional methods);
- Schools where attention is paid to a range of both old and new curriculum elements; in addition to established areas of learning in language, mathematics, the arts, physical education and so on, consideration for a range of concerns such as health, environment, information technology, peace, sex equality, national culture, international relations (teachers are not always well equipped to handle this wide

array; salaries and working conditions in elementary schools are not always attractive to well-educated, enterprising people).

The old idea of a curriculum of general knowledge and skills to provide a firm foundation for continuing education, training and, ultimately, working life and citizenship has not been abandoned. Rather, it has been rephrased to take account both of the enlargement of knowledge and the demands of universal secondary education. Whilst continuing efforts are made to sustain an image of child-centred individualised education, these usually appear as flavouring rather than staple ingredients in reform proposals for the curriculum. Elementary schooling is therefore in the balance. The workshop and laboratory of educational reform need to be encouraged and sustained through renewed attention to the structures and strategies, the roles and relationships, that are required if the reformers' ambitions are to be realised.

Chapter 6

SECONDARY EDUCATION

The Stage Defined

A useful, simple definition of secondary education is provided in the French report: "Secondary education in France spans (the period) from the end of primary school up to the *Baccalauréat*. It is made up of three parts ... *collège*, vocational *lycées*, general and technical *lycées*". This definition locates secondary education as the phase following elementary or primary education, indicates a target – completion of a terminal examination (taken usually at ages 17-18) – and points to a differentiation of curriculum which, in the case of France, includes also a differentiation of type of school, beyond the college. Other systems, such as those of Scandinavia, Canada, England and Wales, the United States, New Zealand and Australia, have roughly comparable differentiations of curriculum, but generally within an all-through comprehensive school.

Secondary schooling is both a continuation of the basic education of the elementary school, and a bridge to working life, further vocational and higher education and adult roles. Consequently, it should be the focus of very wide-ranging debates and discussion. In general, countries have moved on from the experiments and controversies surrounding the introduction, in the 1950s and 1960s, of the comprehensive school. The question of curriculum is indeed the central one at the secondary stage. In the words of Jean C. Forquin (in a Secretariat paper) questions abound: "What kind of knowledge is worthy to be transmitted...? What can be the optimal balance between different areas of knowledge ... science, technology and humanities ... liberal and vocational, general and specialist, academic and everyday-life knowledge ... between common and differentiated syllabuses ... core curriculum and options?"

What indeed, one is tempted to add. Disappointing even in the professional and research literature, as much as in the country reports, is that there is little evidence of informed, public and professional debate on these and related questions. As reiterated throughout this report, government policies and programmes which purport to answer these questions have been introduced. They have provoked resistance (most noticeably in the United Kingdom and the United States and, periodically, France) but they are not themselves the product of community or profession-wide analyses, reflection and discussion, they are not accompanied by large-scale development projects and they have not generated informed public engagement with the issues. Certainly there has been extensive consultation but the outcomes have a remarkable consistency across countries: secondary curricula should be built around an enlarged core of compulsory subjects and students directed towards further/higher education and the working world.

Yet the profound economic, social and cultural changes already outlined in Chapter 2 point to the need for extensive reviews of the secondary school curriculum and pedagogy. In the commendable efforts to raise standards, husband resources and provide a strong structure for learning in the secondary schools, governments will need also to assure themselves that the changes are proactive, not reactive.

Directions of Change

One of the most visible trends in both the junior and senior phases of the secondary school is the strengthening of the vocational strand, whether within the comprehensive school itself or through specialised prevocational and vocational institutions. At the risk of oversimplifying a very complex set of changes, it is possible to distinguish two trends. In the United States there is a dissolving of the traditional vocational-general education distinction at the secondary stage. In Germany, the dual system of shared industry-school responsibility for vocational education and the distinct vocational streams are as strong as ever. A number of countries are building vocational or prevocational elements into their general education (much as, in an earlier period, general studies were built into the vocational programme).

Historically, in many if not all countries, the general and vocational parts of secondary education have been distinct and separate: in curriculum content, training of teachers, organisational practice, credentials and administration and often in conditions of service as well. In most countries the gap is narrowing, mainly as a result of a reorientation of the curriculum of general education. The Finnish report, for instance, alludes to the integration of upper secondary education by absorbing vocational training. In Sweden vocational study programmes have been integrated in upper secondary schooling since the early 1970s. A second phase of reform is now in preparation with the aim of strengthening vocational education by prolonging it from two to three years.

In the United Kingdom, France, Australia, Ireland, Italy, Turkey, to mention but a few, efforts are being made to introduce vocational elements into the curriculum of the secondary school. These might take the form of the prevocational Technical and Vocational Education Initiative courses in the United Kingdom, which are supported by the Training (formerly Manpower Services) Commission and conducted in the normal school for 14 to 18 year-olds. Or the vocational element may be tied to a specific qualification, such as the French vocational *Baccalauréats*, taken after following a course of study parallel to more academic or general streams.

Resources for new initiatives and experiments in vocational and technical education usually come from departments or ministries – or sections thereof – that are separate from those responsible for general and academic secondary education. There is a close affinity among these departments, industry, employment and parts of treasury. It is from this combination of forces, and the economic interests they express, that there is a powerful momentum for change in secondary school curricula. These changes can be summarised as desired learning outcomes, which include:

- Flexible or "multi" skills which can be applied across a considerable range of settings;
- Positive attitudes towards working life and work organisation;
- A technological orientation and a broad understanding of technological change in modern society;

- Competence in a specific vocational area or areas to a level permitting immediate entry to the workforce or transition to further/higher education.

Vocational and work-related trends in secondary education are the subject of other OECD studies and need not be elaborated at length here. But, before we leave the subject, mention should be made of the interaction of gender issues, equity and access, and the vocational thrust. In some countries, including Australia and the United States, there has been a tradition of providing vocational education for academically weaker students as well as those with a strong technical or practical bent. In practice, no matter how high-minded the motive, many of these programmes quickly assumed a low status and students were drawn heavily from the lower socio-economic groups. Vocational education, having been introduced to meet real needs in society and individuals, can in effect reinforce social and economic disadvantage. Recognition of this fact helps to explain why some systems have moved to merge the vocational and other streams of the secondary curriculum.

Counter to this trend, however, is the attempt, through reformed vocational programmes, to bring about or support changes in industrial practice, and to involve more students in working environments from which academically-oriented studies have deflected them. The vocationalising of the curriculum is therefore to be seen as part of endeavours to effect a much wider restructuring of the economy. Recent Australian policies, for example, reflect this very clearly.

Apart from a large-scale drive to strengthen the vocational and the work-related parts of the curriculum, reform at the secondary stage has yet to match the scale and scope of organisational changes of the 1950s to 1970s – the comprehensive movement. School reorganisation and system restructuring have been in advance of curriculum and pedagogical reform.

This helps to explain the dissatisfaction still widely expressed by employers and further and higher education institutions with the skills, knowledge and attitudes of secondary school graduates (although we should recognise a similar tendency in comments by secondary school teachers on the graduates of elementary schools). Despite the massive efforts in most countries to give a more technical, technological and work orientation in curriculum for students from about the age of fourteen years onwards, there are yet more demands for large-scale change. Moreover, the implications of rapidly increasing rates of participation resulting in a very high percentage of the age group staying on to complete six or more years of secondary schooling, have not been fully assimilated through curricular reconstruction. In North America the growth in participation rates is coming largely from sectors of the population who are fairly low on socio-economic scales, from migrant families, and from ethnic minorities. Their needs cannot be met simply by "more of the same", whether in curriculum or pedagogy, and some of the most interesting curriculum innovations are to be found in systems that are making positive responses to their needs.

In Canada, and within a broad range embracing the humanities, social and natural sciences, mathematics, fine arts and industrial and business education, there is a growing recognition that the traditional secondary school offers too little to the "less academic" student. One response is to provide common courses but at different levels and with differing degrees of emphasis from the more academic to the more practical. This has not, in Canada, resulted in a reversion to traditional forms of streaming including the division at age 14 or so of students into "academic" or "vocational" streams. The lines are more blurred than that and vocationalism is a theme that increasingly informs the curriculum of all students and at a level of generality betokened by terms such as "generic and transferable skills". But such skills appear to be more difficult to teach and acquire than the more

familiar, specific trade-based skills. The essence of the problem seems to be the combining of the general, lifelong, vocational or work orientation with specific skills for particular jobs, in a curriculum framework of general education.

As the French report states, one of the main aims of the reform of the vocational strands in the secondary stage is "to provide young people with a general and vocational formation that will make them more adaptable during their working lives to technical and employment changes. At the same time, the young must be able to adapt rapidly to a first job". Furthermore, the French authorities state unequivocally that an "authentic policy of vocational formation cannot be envisaged without strengthening the relationship between national education and the economy". Vocational formation, as we have seen, is a major recurring theme in policy discussion of secondary (and primary) education in practically all Member countries. The combining of the general and the vocational remains a real issue.

In line with the widespread attention to work-related education and training, priority is being given to labour market needs (including ensuring that adolescents are kept from the labour market as long as possible and by various stratagems in a period of high youth unemployment). Necessary as this attention is, it can go too far. Other themes are no less important: personal values, citizenship, general culture, education for leisure and for adult relations. It is necessary to have in mind a broad range of educational needs and to consider closely the socio-cultural and the individual characteristics of the student population. Important as the labour-market/economic analysis is, it should not hijack education.

The dilemma is well illustrated in Turkey, where the authorities state that "our human resources are our most valuable national asset and the most important driving factor of development. It is essential that this potential be exploited to the maximum extent through education, and utilised for development". Hence the human capital theory and human resource development strategies. In Turkey, the "exploitation" of human resources is accompanied by an acknowledgement that citizenship, moral and ethical education must play their part. In the educational parts of the current (fifth) Five-Year Development Plan, however, prevocational education and job training in co-operative arrangements between schools and the private and public sector enterprises is the dominant motif.

Thus, it is "the technological and socio-economic improvements taking place in Turkey" that necessitate adjustment in the school timetable. But the main thrust of secondary education is still academic, with 60 per cent of enrollees following academic programmes and academic courses being fed into the vocational streams to facilitate transfer of students to higher education. The authorities identify several problems in matching school curricula to workforce requirements, including the cost of the programmes and the difficulty of retaining teachers.

One other example of the way in which vocational and work orientations are affecting curricula and pedagogy in secondary education may be mentioned. In Australia, moves have been made to link the secondary school and the technical and further education colleges. These colleges, which are in the tertiary or post-compulsory sector, are in an expansive and enterprising mood. They sense that the present socio-economic environment is presenting them with unprecedented opportunities. Link courses or short "taster" units are provided by the technical and further education (TAFE) colleges to give students a "feel" for what the sector offers. Secondary students are able to take TAFE courses taught by TAFE teachers in TAFE facilities during school time or by secondary teachers using school facilities. Students can thereby gain school or TAFE credit. The flexibility of these programmes extends into the industry setting, so that accredited people from a particular industry are able to teach TAFE subjects to secondary students. To quote from the Australian report, "at Weipa, an isolated mining town in northern Queensland, a class of

(secondary) students spend 4.5 hours each week in the technical training centre of Comalco Mining Company. Students start at 7.00 a.m., the normal starting time for the company's workshops, thus gaining a more realistic experience and avoiding missing time from other subjects". By this means, students gain work experience and have their programmes recognised in both the secondary school and the TAFE college.

In Australia there are other co-operative arrangements between the TAFE colleges, secondary schools and enterprises, including joint courses which are collaboratively taught on both TAFE and school campuses, and state committees involving TAFE, secondary school, government and enterprise representatives. Work experience has become a standard practice "to the extent that most students would have at least two week long sessions in either year 10 or year 11". The Australian report continues, "Now that the organisational and legal matters are under control and the nature of the experiences is understood by more teachers, planning is under way to link the activity more closely with career education and curriculum development for the world of work." Just as students are having direct and solid encounters with the world of work, so are there new opportunities for teachers. Schemes are being opened up to enable teachers to spend periods in industry.

Vocational orientations have been dealt with at some length, for the very good reason that they feature prominently in developments in many if not all countries. A number of other themes can be mentioned briefly. This is not a comment on their importance but on how national education agendas are constructed in many countries. The needs of ethnic minorities are proving to be one spur to rethinking (e.g. Australia, Canada, the United States, New Zealand, England and Wales). Recognition that in the future, education will be continuing, recurrent, lifelong is another spur to rethinking. Interest in the theme is apparent in several country papers (e.g. Canada, Turkey, Finland, Ireland, Germany, England and Wales, the United States, Australia and the Netherlands). Also, there are proposals and practices for extending opportunities previously denied them to girls, to students with some form of handicap, and students with special gifts.

The important initiatives just mentioned are highly significant and they broaden the picture of changing directions in secondary curricula. But they are, it seems, rather piecemeal; hence, they underline the general point that, at the secondary stage, overall curriculum reform has yet to proceed to the point where the fragmentation, academicism and perceived lack of interest and relevance for many students have been overcome. This point is probably more apt at the lower than the upper secondary stage, given the attention now being paid to vocational work/higher/further education in curriculum reform for older students. As was suggested in the OECD four-country study of lower secondary education, this stage too often appears to lack a true identity, by contrast with the "foundational" approach in the elementary school and the specialisation and adult-orientation of the upper secondary grades[42]. The comprehensive reform proposals in Japan are much clearer and more definite in respect of the primary and upper secondary than the lower secondary phase. This is by no means atypical, and it highlights the need for countries to give more attention to the vital early adolescent years.

Educators themselves have been generally slow to innovate other than on the principles of substituting newish content for old and introducing limited reform in order partially to meet the changing needs of an expanding and diversifying school population. The radical changes being promulgated for American secondary education do, however, move in a somewhat different direction from other countries. One of the American targets for attack since the 1950s has been student-centred life adjustment programmes which have made but modest intellectual demands on students and given rise to the phenomenon of the leisure-oriented youth culture high school. The federal authorities, now extensively supported at

the state level, have declared the need for wide-ranging reforms in the secondary school. The consensus that developed around the famous 1959 *Conant Report* – with its advocacy of a diversity of course offerings, the Carnegie time unit, ability grouping and, effectively, multitracked curricula – has collapsed[43].

Secretary of Education 'Bennett, following Secretary Bell, played a highly visible role in presenting American school systems with a challenging agenda which is giving a different flavour to secondary education:

- Strengthening the academic curriculum through increased requirements for study of courses in mathematics, science, language, humanities, and projects to define appropriate graded content in these subjects;
- Urging increased enrolments in such academic courses and accepting or fostering declining enrolments in vocational, home economics and industrial arts streams (but vocational courses are being incorporated into the academic mainstream);
- Defining minimum competences in tool subjects at age and grade levels;
- Renewed commitment to development work in humanities, social studies, sciences, mathematics and language, e.g. California State Department of Education's History-Social Science Framework (kindergarten – year 12) and science projects sponsored by the American Association for the Advancement of Science, the Carnegie Foundation and the National Science Foundation;
- Increased use of educational performance indicators, including "learning outcome" indicators, published annually in the US Department of Education's *The Condition of Education*;
- Strenuous efforts to raise scores in the Scholastic Aptitude Test and other student performance measures, e.g. the "Wall Chart" which lists comparative scores and other educational indicators state by state (inaugurated in 1984 by Secretary of Education Bell), state "report cards", and changes in testing procedures to reflect what is taught subject by subject.

This list points to a preoccupation, which spread after the launching of Sputnik in 1959, with the performance standards of the secondary (and elementary) school. American school performance, as measured by test scores, declined for many years in the 1970s and only as a result of enormous efforts has it begun to recover to some degree in the years since *A Nation at Risk* 1983). International comparisons using the measures of the International Educational Achievement programmes are not generally favourable, for example in the mathematics tests[44], and have provoked anguished debate. Education has stayed high on the political agenda for several years, with resulting special programmes, governors' conferences, improvements in funding, and intensive public interest. This high level of interest seems to be ebbing somewhat[45], which must give concern to the American authorities bent on a continuance of the present reform agenda. However, while educational reform, and especially the standards of student attainment, in the secondary schools is still seen as part of a national strategy to retain leadership, it may be expected that the present momentum in curriculum and assessment will continue.

Also to be put in the balance is the continual high level of commitment to the civic, democratic and equity roles of the secondary (and elementary) school. Thus, in the opening passages of *James Madison High School (op. cit.* in Note 17) Secretary Bennett described the high school as a common, democratic enterprise. The values and goals of equal participation in the benefits of the civic culture are proclaimed. Yet large-scale poverty exists in America and this poses major problems for the schools; approximately 10 per cent of the

population requires special education services and the provision is uneven; immigration continues to bring into the country people whose educational requirements entail special provision[46]. There is a risk that, despite policy commitment to the contrary, the secondary school will split: a minority of academically-oriented, high achieving schools attended by the more privileged or advantaged sectors of society and a large, variegated and often mediocre group for the rest.

John Gardner posed the question in the title of his book: *Excellence: Can We Be Equal and Excellent Too*?, and argued "yes" as, in curriculum terms, did Harry Broudy and his collaborators in 1964[47]. The present generation of reforms takes a similarly optimistic view: there is a firm belief that the conditions that must be satisfied for secondary (and elementary) school reform to take root have been isolated by research and practice, that progress has been made as a result of legislative changes in course requirements and accountability measures, statewide action in testing performance, a variety of incentive schemes, firm leadership at federal, state and local levels including the principal's role, and projects targeted on particular student groups – underachievers, disadvantaged non-participants. More of the same is being recommended[48] for secondary education, yet the range of challenges remains vast. By focusing on very specific and limited targets, one by one, the American authorities do seem to be making real headway, nonetheless. The message of historian Diane Ravitch, in commenting on the "reformers, radicals and romantics" of the post-war era up to the late 1970s seems to have been heeded: "The more limited and specific the goal, the more likely was the reform to endure"[49].

Yet, even after several years of sustained effort, it is unclear whether the current American reform has the potential to bring about the significant general improvements in performance standards or to effect the changes in the culture of the school which have been affirmed as goals for the reform. In Great Britain, too, the 1988 Education Act is predicated on the declared need for a stiffening of academic requirements in the middle (and lower) levels of secondary education – new examinations at age sixteen and nationwide testing at age fourteen with goals very similar to the American ones.

In both the American and British cases there seems to be a belief that the most obvious requirements for secondary curriculum are academic rigour, concentration of studies, improved school discipline and a firm linking of school, further study and working life. These four points constitute in essence the text of reform of curriculum and pedagogy in these countries, and in some others.

Many intervention programmes and reforms of the 1970s and 1970s were designed to meet special needs and problems (e.g. social disadvantage, lack of student motivation to learn, undemanding programmes for talented youth) or to experiment with new patterns of curriculum organisation (interdisciplinarity, theme-structured curricula) or with new styles of learning (independent, individualised study, assignment-based learning, etc.). Few, however, seem to have achieved widespread adoption. Had there been more success with these innovations, perhaps there would be less dissatisfaction with the outcomes of schooling in those countries where the debates are at their noisiest. It is difficult to say whether dissatisfaction is a result more of changes that have been made or ones that have not.

How extensive have the changes in curriculum and pedagogy really been? The curriculum of the universal school is still organised around modules and sequences of specific subjects originally introduced into the highly selective secondary schools of a previous era and progressively modified (or watered down) in the face of a changing school population. The school day and the school year are generally much as they were several decades ago. (Japan, however, is adopting the five-day school week, to adjust to the five-day working

week increasingly being favoured by Japanese enterprises – in response to foreign criticism that the Japanese are working too hard!)

Although formal examinations are not universal, the patterns of written and oral examinations that have traditionally constituted the *rites de passage* from school to professional employment or higher education still very largely prevail, notwithstanding innovations in examination practice. Among those few countries where a significant process of change in secondary schooling is occurring, in the United States and the United Kingdom what is conspicuous is a trend towards greater rigidity – or coherence – in curriculum structure and organisation and increased emphasis on highly-structured learning with the teacher very firmly in control. This results not from fresh studies of the socio-psychological needs of youth but from a strongly held view about performance inadequacies in the face of economic crisis.

It is perhaps misleading to refer to a debate taking place on the curriculum of the secondary school in those countries experiencing significant change. Instead, there is either controversy: a series of moves, mostly at central government level, is followed by often negative or hostile responses at the local level and within the education profession (notably in the United Kingdom); or there are again central moves, followed by widespread take-up across the nation and intense criticism by individual commentators and some professional bodies (notably in the United States and Japan).

The public in several countries (for example Germany and Switzerland) is not engaged in a fundamental debate about the content and structure of the secondary curriculum, but it is demanding more and better education. The focus of attention is on operational issues: increasing participation rates, optimising chances of success and relating studies ever more closely to labour market or higher education opportunities, better management of resources to achieve priority outcomes. These trends are reflected, in Germany, in the remarkable improvement in the drawing power of the *Gymnasium* and the *Realschule*. By comparison the *Hauptschule* is in critical decline: success in education and in life is associated not with the latter but with the academic *Gymnasium* and the "reality-centred" or "life-oriented" *Realschule*.

A Clash of Cultures: General and Vocational Education

The focus of one of the very small number of major cross-national debates on secondary education arises from a historical clash of two-cultural traditions: liberal, humanistic, general education and vocational-technical-technological education. There are echoes here of the two-culture thesis of C.P. Snow. Much debated in the 1960s, that thesis itself was embedded in the European historical tradition. In Germany the lines of this debate derive from the brilliant success of the von Humboldt-Goethe project in the eighteenth century, in distinguishing the two cultures. Ever since, the *Gymnasium* has provided – and required – high academic standards in a comprehensive range of mathematical-scientific-literary-social studies. However, by contrast with the United Kingdom and until fairly recently at any rate France, the German tradition has found a secure place for vocational education which has, since the time of the late nineteenth-century reformer, Georg Kerschersteiner, enjoyed a high status as a parallel stream in secondary education. In the United Kingdom, with the inception of the Manpower Services Commission, serious attempts have been made to redress an imbalance in secondary education which has been consistently if ineffectively criticised since the middle of the nineteenth century for its neglect of the technical, the

practical and applied. In France, with the advent of the new information technologies, efforts are afoot to place alongside the classical literary-scientific cultures, which have dominated secondary education, a *culture technologique*. This is echoed in a policy statement from Quebec, which treats technology as *une dimension essentielle de la culture contemporaine*[50]. In the United Kingdom and France the emerging new policies and structures are comprehensive in scope and complex in organisation.

There are some signs, too, that in the United States the traditional vocational-general education dichotomy is dissolving both because specific vocational training is being squeezed out of the high school (in the move to raise academic standards and because of incorporation of general-vocational elements into the mainstream curriculum). This broader emphasis on a general preparation for the world of work is to be found in many countries – not only in the United States but in Japan, Australia, Finland, Sweden, Ireland, Turkey, Canada, England and Wales, and others. Either vocational training is provided at a separate institution, including work place training centres, or it is being incorporated through a variety of experimental programmes within the secondary school. Whatever its location, by encompassing programmes of generic and adaptive skills, work experience, improved career preparation and close links between industry and education, it is creating a new ethos. These and similar changes are very probably the early stages of long awaited and much needed overall restructuring of the secondary school curriculum. They arise, however, not from within the education system, as a consequence of vital movements there, but from the impinging on educational policy of powerful forces.

Chapter 7

PROCESSES OF CURRICULUM DEVELOPMENT AND PEDAGOGICAL REFORM

Review, Evaluate and Develop

For a period in a number of OECD countries, a particular model or strategy of curriculum development appeared to achieve a commanding position. The curriculum was conceived as organised bodies of knowledge – subjects or subject areas – which were in need of systematic review, evaluation and modification to meet progress in knowledge (subject and pedagogy), social realities and attributes of changing school populations. Deriving from national projects in mathematics and science in the United States in the 1950s, the favoured development strategy consisted of:

- Assembling a development team of subject and pedagogical specialists;
- Reviewing the current state of knowledge in the subject or subject area;
- Reviewing school practice in the teaching of the subject;
- Defining desirable changes in content and pedagogy;
- Producing trial curriculum materials and teaching-learning programmes;
- Trialing, monitoring and modifying;
- Producing, publishing and disseminating the new curriculum materials and associated pedagogical guides.

This strategy reflected, on the one hand, the importance in school curriculum planning of the scientific and technological Research-Development-Diffusion model of change and, on the other, the continuing influence, from within education itself, of the curriculum reforms of the progressive era: the Eight-Year Study and the writings of Ralph Tyler, Virgil Herrick and others[51].

There were many variations and extensions of this basic strategy: a management by objectives focus, in the tradition of Franklin Bobbitt and Taylorism; involvement of teachers and other practitioners and a shift towards a school- or teacher-based approach; the maintenance of the development group through successive project stages and its semi-institutionalising through national curriculum development agencies; a shift from materials production to in-service teacher development, and so on.

A Variety of Methods

Notwithstanding the prominence of this project-based strategy or set of strategies in several education systems from the 1950s onwards, the practices of curriculum development have always been varied. Throughout the whole period of the modern curriculum development movement, among the principal vehicles have been commercially published materials in the form of texts, guidelines, multi-media resource kits, etc., and the state, provincial or national ministry apparatus of committees, consultants, advisers, inspectors and so forth. Consciousness-raising exercises and citizens' involvement in determining goals and priorities have also played an important role in the development process. The Minnesota Dialogue on Education, for example, has contributed to raising the debate about "the basics" from rudimentary skills to higher-order thinking processes[52]. The specially-assembled temporary teams of subject and pedagogical specialists, funded through foundations and newly-established curriculum development centres, were but one element, albeit a most prominent one for several years, of a considerably more diverse movement. Trial schools featured in the projects, but not only in them. The Italian upper secondary system is noteworthy for school-level innovations, many initiated by the school itself.

The situation in several countries is succinctly outlined in the United States report: "First, curriculum development and reform is a never-ending process. Second, because education in the United States is not a centralised enterprise, but rather a loose collection of parallel but independent state systems there is an almost infinite variety of methods of curriculum reform."

The American report identifies a range of initiatives: leadership in defining directions and criteria by national bodies including the National Governors Association and the Council of Chief School Officers. But these bodies have responded, in the first instance, not initiated. Leadership has come predominantly at the national level from Secretaries of State taking a high profile and declaring their own curriculum and pedagogical aims, and the Federal Government through the Department of Education, the National Endowment for the Humanities and the National Science Foundation. More than two hundred reports on different aspects of education have been produced during the 1980s, many at the national level.

Clear, firm statements from authoritative national sources and figures play their part. Such statements, on curriculum goals and priorities and the kinds of knowledge and capabilities students are expected to acquire in schools, have performed a major role in the American development strategy. Very similar approaches are evident in England and Wales where, as we have seen, the major instrument has been legislation at the national level, in the Canadian provinces and throughout Europe and Japan.

Statements of goals and priorities in the curriculum are not, however, the same as curriculum development implementation. The questions are, what kind of development programme follows these declarations, recommendations and enactments, and what conditions need to be satisfied for the implementation of change? Unfortunately, the country reports generally do not answer these questions, although some, including the Americans, have been active in follow-through. State legislatures have responded by legislating, for example, increased study requirements and a longer school day. State departments follow suit by rewriting courses, and producing revised guidelines and tests and mounting in-service programmes to induct teachers into the new ways. Inevitably, the traditions of local or district control and the teacher's freedom to teach in his/her own chosen way are in jeopardy in this generally prescriptive, top-down approach.

Of all the processes of curriculum development, the textbook and the performance test still appear to be dominant in the United States. For the implementation of change, they are inadequate vehicles and more attention to teacher professional development would seem advantageous. This fact, combined with the general direction being sought in the American reform, is giving to current processes of development the character of a force for consolidation and stability in the curriculum at all levels. The messages are being fixed through incorporation into the highly influential educational and orthodox media: the text and the test, linked by instruction.

Curriculum Development, INSET and Support Systems

Fortunately, in most countries, curriculum development has never been isolated from professional development, most particularly through in-service education programmes for teachers and principals. A common pattern of development consists of the production, through a commission or government department, of a broad curriculum plan. This may be for the whole curriculum – as in the case of the Italian elementary school reform or the Japanese reform of the whole system – or for a subject area, such as, in recent times, computing in schools. If adopted, this plan is followed by a programme of conferences and training sessions for practitioners, to ensure that the plan is adopted. All too often that stage is abbreviated and seldom are teachers involved. For reasons already discussed above, unless follow-through is rigorous and extensive, adoption is likely to be partial. Resources on a very considerable scale are required, not only for equipment and materials – computing science is an obvious case – but for consultancy and support services and for staff development.

The Irish report outlines key principles for project-based curriculum development: adequate staffing at centre and periphery; expertise in network schools; adequate provision for staff development and project evaluation; real potential for mainstream adoption. Such an approach is commendable, but it requires a range of services, which are costly.

It is a matter of concern that such services are being reduced in many countries, just at the time when governments are promulgating large-scale reform. Australian state systems of education, for example, have all suffered substantial reductions in consultancy and support services. Yet major restructuring is occurring, including devolution to schools and school communities of responsibilities previously exercised by central authorities. The Federal Minister has recently outlined his ideas for moving towards a national core curriculum and for strengthening the vocational orientation of secondary education. Such moves will require sustained follow-through with well-articulated support services if they are to succeed. Neither the curriculum branches of the state departments nor the Commonwealth Government's own curriculum development agency is being strengthened to cope with these requirements.

Similar requirements are ensuing on the large-scale legislative changes in British education, yet in the United Kingdom, too, resources for local authority curriculum support and consultancy services have been drastically reduced. The previous national agency for curriculum development, the Schools Council, was disbanded by Secretary of State Sir Keith Joseph in 1984, at the time when the major thrust of its work was moving from high profile, national, subject-centred projects to a grass-roots teacher and school support service. Its successor bodies have had neither the remit nor the resources to sustain a comprehensive role in curriculum development. The strategy envisaged for implementing the

curriculum consequences of the recent legislation seems to be very largely one of legislative requirement combined with strong accountability measures: curriculum development would therefore be a means to be adopted (or not) in accordance with the Act and the associated monitoring processes.

An overview of how systems need to respond to the legislative or blue riband committee initiatives is provided in the Canadian report. Canada is devoting its attention mainly to communication skills, mathematics, science and social studies. Other areas are also being reviewed and developed in individual provinces, including health, arts, physical education and family life studies. The structures and processes outlined there indicate that a well articulated and resourced structure is required. Following needs assessment and detailed committee work (which involves extensive consultation), participation by teachers and others in course-writing groups is normal. This is followed by production and distribution of high-quality materials; monitoring and evaluation of these materials in use; workshops and consultancies to help teachers and school boards come to terms with the new requirements; new forms of assessment; appropriate support for the local development work that curriculum guidelines normally require.

The Canadian analysis typifies the actions believed appropriate by modern education systems which have experienced a variety of approaches to curriculum development. Such actions will succeed only when there is a highly-structured, well-managed provincial or state-wide system, where there is a high level and good distribution of professional expertise; and where there is a continuing allocation of substantial funds specifically for development, not just maintenance. These conditions are proving very difficult to satisfy in many Member countries.

School-based Curriculum Development Waning?

Despite passing references in several country reports, school- or teacher-based curriculum development appears to be on the wane. If it is not, official notice is fleeting. In every country, the major development initiatives are coming from public authorities operating from key central sites, whether provincial/state or national. Teachers participate, sometimes directly, in development projects but more often through consultative mechanisms. The French report is quite unequivocal.

> "Education being centrally defined in France, the changes in practices at school level are essentially the result of decisions that are taken at national level, and then circulated, along with the date on which they come into practice, through official channels. The role of the teacher is as the intermediary between the official decision-making approaches and the student. At the stage of consultation, which precedes the decision, teachers may be involved but through their association or union. The Ministry is quite definitely the curriculum authority and where illustrations are required to demonstrate to teachers the meanings of curriculum decisions, the Ministry will organise them. It also maintains regular contact with the publication of school textbooks to ensure that curriculum guidelines are being followed, and through the National Centre for Educational Documents will, from time to time, publish classroom materials."

Teacher involvement in the development process continues to be strongly emphasized, however, in a number of systems. The central role of teachers at the municipal level of development is affirmed in the Finnish report: "school work can get new forms only if teachers can be deeply involved and if they are continuously supported by school adminis-

tration and other people outside the school". Similar sentiments are found in the New Zealand and Australian reports.

Finally, in this summary of trends in the management of curriculum development mention must be made of two procedures which governments are finding effective – and economical – in pinpointing directions for developing curricula at all stages: the assessment and examination systems, and comprehensive guidelines. Both operate within a framework of legislation and regulations.

Examinations are a powerful way of influencing curriculum decisions. For secondary education in the Netherlands, the regulatory structure is provided by an Act of Parliament (1968) as amended and by a large number of official circulars. Subjects and minimum timetables are thereby regulated. Moreover, Ministers are empowered to determine examination programmes by means of a circular and, according to the Netherlands report, are using this device to formulate "more detailed, exact and extended examination programmes". Further control is anticipated as a result of government resolution to: *i)* determine grade-related criteria for elementary and secondary education; and *ii)* charge trade and industry with the determination and development of professional profiles for vocational education.

These are not isolated trends but are becoming increasingly evident across OECD countries. Their implications for curriculum development have yet to be fully felt. The tightening of examination and assessment requirements and the move towards grade-related performance criteria, still at a relatively early stage, are not being experienced in all countries. But they are becoming more attractive to governments and will set development targets for the whole system from individual teachers to national ministers.

The other conspicuous trend – but a longer established one – is the issuing of curriculum guidelines. These have become more comprehensive and illustrative. In Australia, for example, the Victorian Ministry of Education has a total curriculum "framework" project through which Ministry-orchestrated groups are drawing up detailed guidance on what to teach and how to teach it, subject by subject. The Italian reform of the lower secondary curriculum, dating from 1979, defines conceptual maps but not detailed topics or methodologies. It is at one and the same time more stringent and less prescriptive than previous Ministerial directions.

Guidelines give government a major say in the direction of curriculum development but not necessarily an exclusive say. Often, the guidelines are drawn up by practitioners and given government endorsement. The New Zealand report draws attention to increased scope for school-based curriculum development and for school-community dialogue and resources made available for supporting in-service education.

The Norwegian report, in similar vein, makes the point that recent revisions of guidelines have resulted in greater clarity in determining "responsibilities of the various levels in the school system for curriculum development and planning". In this case, there is greater, not less emphasis than in previous guidelines on school-based curriculum development, including co-operative development. "It is the intention of the Curriculum Guidelines that the common curriculum planning done by the staff shall provide teachers both with a pedagogic foundation for their classroom planning and be the source of ideas". Funds for teacher participation in curriculum development and for in-service education have been provided.

The claims made by governments for the guidelines approach frequently allude to increased scope for teacher-initiated and co-ordinated curriculum development. As we have seen, this may be backed up by increased resources, but that is not invariably true. On the face of it, large-scale, diffuse programmes of local development are likely to be more

expensive than highly-centralised procedures. They may be more effective and more motivating, however, a claim frequently made for local initiative in development processes. One difficulty of the guidelines approach is that a considerable effort is made "up front" but follow-through, being more in a lower key and necessarily extending over long periods of time, may lose momentum and fail to attract continuing funding.

It is a striking feature of the expressed interest by governments in guidelines that they are at one and the same time a form of direction by government and an invitation to teachers and school communities to exercise more responsibility in developing curricula. Guidelines illustrate a pervasive paradox in curriculum reform. Freedom is, in a sense, being enjoined. At the same time it is being constrained or at least highly structured, most obviously by grade-related criteria, examinations and other assessment procedures now in vogue. Close attention will need to be paid to the multiple and potentially contradictory effects of these various strategies and processes of curriculum development.

Chapter 8

CONCLUSIONS

"When there is talk of the future, the crow laughs."
(Japanese proverb)

Educational processes, contents and methods are changing throughout the OECD area. The pace of change varies and each country addresses problems in its own way. Directions, too, vary, but there are broad trends and movements in which every system participates. Patterns of the past may be disclosed through systematic inquiry and historical analysis; about the present it is more difficult to be clear. The future is, simply, unknown. The response of educators is to emphasize the need to gear curriculum and teaching to a changing and uncertain world. Thus, students are encouraged to develop skills of analysis and communication, to be problem-solvers, flexible thinkers, adaptable people. No one subject, but the whole curriculum, i.e. the resource and general education focused on contemporary life, issues and trends, is ever more necessary as a foundation for specialised knowledge and skill.

These ideas and trends relate to social, economic and cultural factors which, in differing degrees, affect all countries. They also arise from the creativity and dynamics of the educational process itself. Schooling is not only a response to social and technical change; it has its own momentum and in the contemporary world plays an increasingly large role in shaping the destiny of nations. This realisation lies behind widespread public and political interest in educational outcomes and helps to explain many recent developments in educational policy and practice. Education, public interest groups, employers and governments converge in rejecting a narrow, instrumental and inward-looking education as simply irrelevant to society and stultifying to individuals.

The sharp upsurge of political interest in schooling during the 1980s lends itself to facile explanations. Schools, it is often said, are not keeping pace with the changing environment; or, the standards of attainment by students are not high enough; or, education is a major economic cost and must be rigorously monitored and evaluated in the never-ending quest for efficiency. Then, again, schooling (in some countries) seems to its critics not to be connecting sufficiently with the goals and priorities of government. We are living in an age of high expectations of schooling, at a time when there is considerable uncertainty or disagreement about the directions reforms of education are expected to take, but not about the need for new directions. The old imperatives, absolutes even, have decayed or been discredited and the emphasis is very much on fine-tuning or adapting the education

system to keep it well aligned with social, cultural and, most frequently affirmed, economic change.

Consequently, one of the trends common throughout OECD countries is the treatment of school curriculum in strategic terms by governments seeking to restructure or firmly steer their economies. This reflects both public concern with the outcome of schooling and a rekindled interest in the human capital theory. The content of schooling and the methods used in teaching students are too important to be left to teachers and must be brought into line, it is said, through strongly interventionist policies by governments.

The intervention, however, takes the form less of overt directions or detailed prescriptions than of curriculum guidelines or frameworks. These are instruments of management, whether at national or state/regional level. The teachers are expected to translate guidelines into specific programmes, thereby maintaining their professional role. Professional freedom, therefore, is to be exercised through system-wide frameworks: the balance between freedom and control is a delicate one and many professionals are not convinced that it is being maintained. Guidelines or frameworks, however, are felt to be not sufficient by central authorities and there is a growing apparatus of monitoring, testing and assessing, of performance indicators and other measures which inform teachers of the government's expectations or requirements. At the same time they provide public data on qualitative and quantitative aspects of school performance.

At one and the same time the concentration and the devolution of power are occurring. This is consistent with the management policies of government. There is also an underlying theme: the maintenance of social order in pluralistic democracies and the role of education in social integration the diverse cultural and ethnic settings of the modern State. The field of curriculum is inevitably a field of political action, in the widest sense of that term. This fact is more manifest in some systems than others. Substantial legislative changes are conspicuous in only some countries, but in all systems there is a resurgence of interest in basic skills, core curriculum and the changing relations between general and vocational education. Beneath the surface of these changes, there are issues of national identity, survival in the never-ending race for economic growth, and nagging questions about values.

Changes occurring in the content of education reflect demographic, economic, cultural and political factors. These throw into relief expanding school populations, immigration issues, increasing ethnic mix, and the determination of governments to bring about closer relations between the curriculum and the functioning of the economy. The improvements sought in the quality – and outcomes – of student learning in several countries extend to the humanities, arts, and social sciences but they are weighted towards the physical and biological sciences, mathematics, technologies and the skills needed for effective economic participation.

There are, however, significant cross- or counter-currents. Some of the most interesting developments in curriculum and pedagogy are to be found where there is either a reaction to the excesses of material affluence or a clear recognition of the need for breadth and personal fulfilment in education as in life. Moreover, school systems are grappling with problems which are quite obdurate and which do not respond to the ringing rhetoric of national interests and priorities. Educational authorities continue to make adjustments in an effort to reduce school dropout and school violence. Low motivation, weak or mediocre performance by students, low participation in parts or the whole of the curriculum by subgroups are receiving sustained attention. But serious problems remain: high dropout in lower socio-economic groups, school failure and repeating of grades, low performance levels and inadequate support services. There is little evidence that problems of this magnitude,

which have become chronic, are receiving the comprehensive and sustained attention they deserve.

Responsibility for addressing these and related matters is not the school's alone. Yet the schools do indeed have a major role to perform. Despite progress on many fronts, it is questionable whether either the scale or pace of curriculum and pedagogical change, more particularly in the secondary school, is sufficient for the purpose. Although experimentation and innovation are occurring, the reconstruction of educational content and methods have yet to match the structural changes of recent decades, from selective to comprehensive schooling, from minority to mass education throughout the years of adolescence. Styles of reform tend to be piecemeal and saltatory, not comprehensively planned, consistent and enduring. It is therefore not surprising that progress is uneven.

Yet these are significant developments in curriculum and pedagogy and they warrant close observation by education authorities wishing to learn from one or other's experience in tackling common problems. The primary school in many countries – largely freed of the incubus of entry examination to the secondary school – demonstrates a vitality and an openness to ideas which bodes well for the future. Pedagogical innovations are in evidence; new subjects or subject areas are being introduced; whole curriculum review and planning are common and some systems have embarked on quite comprehensive critiques and reforms. These reforms include new learning strategies, drawing mainly on cognitive science, the incorporation of new subjects – computer studies, and integrated science and social studies are two examples – and problem-centred learning. Primary schools are also being encouraged to achieve more structured curricula, with better sequencing of studies, clear objectives and regular assessments of student performance using objective measures. The primary school is increasingly well supported by parents, and doors (and school gates) once closed to them are now open.

At the secondary stage the most obvious and interesting changes are to be found in the interface between vocational and general education. There are many examples of work-related or work-oriented learning. These apart, however, the secondary school has yet to undergo the kind of transformation to be found in primary schools which have rethought their mission and role.

The waves of subject-based curriculum development projects in the 1960s and 1970s have proved to be less than sufficient in transforming the realised or practical curriculum. It is not clear whether this is because of limited diffusion and inadequate follow-through, or because of basic limitations in the strategy. The projects were usually subject-specific, lacking overall curriculum coherence and served more as demonstration models than a comprehensive strategy of reform. Nevertheless, they provided both a focus and an impetus which seem to be lacking at present. These projects were directly involving teachers. By no means all teachers could participate but even those not working in experimental or project schools or as members of course working groups were able to participate in conferences and discussions on "the new curricula". It is a fair conclusion, however, that the project movement did not succeed in establishing lasting linkages between subject specialists, cognitive scientists, curriculum planners, community groups and the teachers at schools themselves. Impetus for reform can – and does – come from any one of these sources, but the change process is seldom cohesive and comprehensive.

The energies once invested in large-scale national curriculum development projects are now evident in government attempts to reshape the core of the curriculum. These governmental or central authority initiatives are in part no more than a continuance of long-established ministry or central roles. But they also reflect the high public visibility of education (including the criticisms of school performance) and its political significance. Not

to be overlooked is the concept of systematic change – that all parts or elements in a system can be integrated in a reform movement, which needs to be co-ordinated from some central site. In practice, however, the old ways in education have a remarkable persistence. Thus, the call for a new style of education all too often results in a core curriculum prescription, defined narrowly, as a set of required, familiar subjects. Such a definition begs too many questions, about the nature of knowledge and the variable learning processes of students. There is a narrow gap between the subject-centred core and the social, cultural and economic changes which schooling is being admonished to address. Values education is too often submerged under the weight of information-laden curricula and the chosen means prove in practice to contradict the proclaimed ends.

One of the unresolved dilemmas is that schooling is a universal institution in a media-rich world but that teaching methods often embody didacticism from a previous era. An instructional mode of teaching and a regimen of state-wide testing lack the flexibility and imagination we need. They will not foster in students a thought-out set of values of their own, competence in defining and addressing problems, and skill in a variety of modes of expression and communication. As for curriculum content, we need programmes of study that enable students to relate their disciplined knowledge and inquiry skills to the great lessons of the day: ecological awareness, environment, peace (and war), human values, religion and culture, consumerism, and so forth.

From this perspective, among the promising developments – but still in the very early stages of implementation and mainly at the elementary level – are the attempts to map out a curriculum and a supporting pedagogy through a broad set of cognitive structures and strategies. Alongside this, attention needs to be given to the unresolved issue of which values to teach and how to do so. Again at the elementary stage, there is a readiness by many teachers to enlarge a narrow concept of "basics" to include aesthetic and environmental awareness, motor skills, and physical development. Contemporary social and ethical issues are included in a flexible approach to the curriculum. On the other hand, excessive and premature emphasis on assessment and performance outcomes in the so-called basis could produce undesirable distortions and pressures, and will certainly narrow the experienced curriculum.

It is still an open question as to how the curriculum might best be kept alive and vital. Is "curriculum development" something for the experts to engage in, providing classroom teachers with guidelines and materials, or should the teachers be centrally involved from the start? Are well-produced texts and support material from outside the school the answer or should teachers have the opportunity to design and produce (or adapt) some of their own materials? What kind of support, including professional development and access to consultants, does a teacher need and are governments able to provide it? What are the implications for curriculum planning and development of the steady and continuing devolution of responsibility, once centrally exercised, to school boards and councils? What is the *correct* balance between central guidelines and local initiatives in curriculum and pedagogy? How are workforce and community inputs to curriculum planning to be managed at the school/working life interface?

These are but some of the questions that remain on the development agenda. The questions are there but it is not always easy to find evidence that they are being rigorously analysed and addressed in practical ways. Meanwhile, debate continues on the overall quality of the curriculum enterprise and the teachers' interest in, and ability to use, a wide repertoire of pedagogical procedures, whether or not the teacher is a full partner at every stage. Yet in many education systems cutbacks are reducing or holding in check professional support and development programmes.

Are we at a watershed in school curriculum development and pedagogical practice? The developments discussed in this report indicate that in practically all education systems there is, at the very least, a quickening of interest and, in several, major transformations are under way. Conclusions and recommendations, given the situations and circumstances that have been reviewed, will themselves be matters for further debate. The following summary is offered as a contribution:

- At both elementary and secondary levels, there are unresolved issues which require continuing attention. The reconciling of society's reasonable needs and requirements (responsible citizenship, social order, training for work and adult roles, etc.) with the liberty of the individual (including discretion over one's time and choice of activity) is a permanent feature of decision-making in the curriculum. At present, there is need to highlight the balance between "structure" and "self-determination" in the core curriculum. Values education is not well focused, yet there is widespread concern about human conduct and behaviour;
- There has been a tendency in the 1980s to submerge long-term concerns for access, opportunity, equity and fairness in education to economic imperatives. It would be dangerous and unprincipled to continue along this track, given the realities of our societies. Significant educational disadvantage continues to occur. For curriculum and pedagogy, a next step is to seek a new synthesis, which directly and concurrently addresses:
  i) The policy drive towards economic restructuring;
  ii) The technological revolution; and
  iii) The universalist principle embedded in the claim that every person has educational rights and freedom. Present practice in both curriculum and pedagogy continues to favour some while rejecting others.
- Curriculum planning needs to be flexible and adaptive. A continuing process of assimilation is needed in face of the nature and scale of change. Illustrations are provided by the computer revolution, the movement of peoples and the changing roles of countries in relation to one another. This indicates the need for the system-wide guidelines and framework that has become popular. But these are devices that system managers and administrators understand better than teachers and school communities. Up-to-date information on policy directions and on developments across the system is needed by practitioners at the classroom level and by local school communities. Adaptation to change, at this level, is not systematically and comprehensively documented. It seems to be uneven and there is evidence of both indifference and resistance. Yet this is precisely where the changes sought in curricula and pedagogy must take root. The involvement of the school and the engagement of the teaching profession in the determination, as well as the implementation of change are vital.
- The planning process must, therefore, go beyond the desire of the curriculum to include well-publicised guidelines for its implementation: a variety of support services, including consultancy and advisory personnel, and systematic in-service education of teachers, principals – and school boards. This is to presuppose a state or nationwide approach to curriculum. When the focus is the individual school or teacher (school-based curriculum development), curriculum implementation is even more challenging.

- The most urgent and comprehensive general challenge for educators and community alike is to translate into new and comprehensive curriculum designs the numerous expectations, the themes and issues which, as outlined in this report, constitute an agenda for new directions in schooling. The debates about quality, economic restructuring and its educational consequences, multiple and flexible skills, values and contemporary issues of global importance will continue. They will impinge in numerous and varied ways on particular subjects or subject areas and different stages of schooling. But if they are to have more than a marginal or piecemeal effect, it is to the whole curriculum, the foundation core studies and the sequential designs for learning that energies should be directed. It is in this sense that the core curriculum is indeed the central issue. The debates which are occurring and will recur need to be informed by a breadth of understanding of the central mission and purpose of the school in contemporary society. Just how and by whom this mission is to be formulated is not always clear but it is evident that in our societies it must be a participatory process involving wide consultation and public debate of issues. New kinds of professional leadership are required if this process is to result in practical action.

- Transformations have been occurring in curricula and the teaching and learning processes, and their effects are evident in all Member countries. Standards of performance have been maintained despite the immense pressures resulting from quantitative growth and major changes in the composition of school populations. These achievements should be patiently explained and they need to be widely recognised, as they serve to balance the waves of criticism of schooling and teachers which, however justified they may be, are at times blown out of all proportion for dubious publicity and political purposes. The evidence presented in the country studies and in the literature, as reviewed in this report, points, on the whole, to steady achievement and continuing success in the evolution and adaptation of schools and teaching. The very real challenges to the mission of the school in society and its ability to provide a basic education for the whole population are well recognised and vigorously addressed even where, as is now commonly the case, public funds available to support educational progress and expand the present base are in exceedingly short supply.

- It is because there is a platform of achievement and success following decades of unprecedented expansion and diversification of schools that the education profession should develop the confidence to take the public educational enterprise a further step forward. In many countries, this is happening and example of very wide-ranging curricular and pedagogical reform has been discussed in the report. National-level plans and goals are one thing, their effective translation into the practice of schooling in every corner of the land is another and it is evident that more effort is required to design and put into action large-scale implementation strategies. This is most necessary when governments through expert committees or legislative means propose new curricular frameworks as in the French and Italian plans for transforming the primary curriculum, British legislation on core curriculum and American and Japanese national reviews. The contrast between the scale of such plans and proposals and the resources available to translate them into school realities is too great in most, if not all, cases cited. There is a message here for governments, such as those of Australia and New Zealand, which have ambi-

tious plans and ideas for nationwide changes in curriculum content and for teachers and community participants in the change process itself.

- The report has highlighted tension and contradictions which result from the vigorous critiques to which school curriculum and pedagogy have been subjected and the different orders of expectations of schooling that are to be found in pluralistic societies. Such tensions and contradictions are a feature of societies in a state of rapid change and so, far from being seen as giving rise to intractable issues or insoluble problems, indicate a dynamic and creative quality which augurs well for the future. A striking example is the tension between the vocational, utilitarian and instrumental function being enjoined by the enterprise and government sectors, and the liberal, humanistic and general education values that are expressed by educators and often by parents and the students themselves. It is through the interaction of these groups and the clashes of rival projects and programmes that positions and ideas can be clarified and the change process advanced rather than hindered. A further illustration is the conflict between the efficiency and managerial movement which seeks defined outcomes, preferably measures through tests and indicators, and the person-centred educators whose holistic concepts are not readily reduced to the atoms of pre-specified performance.
- Finally, it appears to the author that the greatest challenge arising from the study is to plot the pathways through the forest of ideas and tendencies which are so frequently presented as social, cultural and personal needs requiring an educational "response". Many of these have been mentioned and some explored at greater depth in the body of the report. They range very widely: from the skills base of a technological society to the values and ways of life we all share – or need to share. Is there, then, a set of primordial structures of knowledge and understanding and inquiry, a substratum, of potentially shared values and beliefs, which can be drawn upon in shaping any and all curricula and pedagogical practices? Or are we obliged to accept that, beyond the most rudimentary level, there is no common pathway in curriculum and teaching and quite different routes will be followed? Perhaps the answer is that both approaches are correct. Not a single student, anywhere, should be deprived of access to fundamental forms of knowledge and ways of experience and all should be introduced to the molar or global issues which are vital to life on the planet. But both individuals and society need the specialist skills, techniques and understandings upon which the very existence of society depends and which underpin human well-being. It is evident, in the changes occurring in every education system, that both of these needs must be systematically and comprehensively addressed in the coming years.

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Annex I

FRAMEWORK FOR THE PREPARATION OF A REPORT ON THE STATE OF THE ART IN CURRICULUM REFORM IN OECD COUNTRIES

BACKGROUND AND CONTEXT

The debate about schooling

1. During the 1960s and 1970s many Member countries experienced major changes in the structure of schooling which were not always accompanied by significant changes in the nature and delivery of the process of teaching and learning. As a consequence of the debate surrounding the quality of schooling which many OECD countries are experiencing, there is a renewed interest in the learning process, teaching methods, the selection of content, school environment and their interrelationships.

2. There have been recent significant achievements in Member countries. They include large volume increases in student numbers in the education system, major policy initiatives and improved school practice, such as specific provision to meet special needs, improved retention rates and, in many countries, higher overall standards and considerable progress in defining the characteristics of successful schools and high-quality curriculum in a period of continuing social, cultural and economic change. Nevertheless, the decade of the 1980s is witnessing an increasing concern about the aims and the effectiveness of schooling in the context of these changes. There is a divergence of views in these debates, some sharply focused on economic competetiveness and others more broadly concerned with individual well-being and other aspects of personal development. How the changes are perceived influences the debates about curriculum policy and planning. Changes in the economy from being production-oriented to service- and information-based necessitate people with much higher-level skills than the schools are currently preparing. In countries with well developed systems of vocational education, the problems are not as acute, but adjustments are required in the type of vocational and prevocational preparation being offered. Partly as a result of this lack of confidence, however, there is an attempt in some countries to *redefine the basics* in response to the above pressures.

Shifts in educational provision, control and accountability

3. In some countries, a further change is being witnessed regarding the *provision of education*. It is no longer the sole responsibility of ministries of education, even during the compulsory school phase (one striking example is found in the United Kingdom with the influence of the Manpower Services Commission). Although this adds to the pressure on schools to change, it is not always clear how coherent these changes are one with the other. After a period of rapid expansion, educational development is entering a phase of consolidation and with it a decline in real resources limiting the scope for experimentation.

4. Again, partly related to the influence of the technological culture and new realities in the world of work and partly to the search for better measures of *accountability*, we have heard the need expressed for clearly *defined objectives* for schooling. The problems are well known: the industrial notion of quality control is not easily transferable to school outcomes – children – who vary enormously in their abilities, social origins and interests. What is easily quantifiable is not necessarily the most important factor. However, there is a move in Member countries to provide better information about schools and their varied outcomes. The economic model for indicating performance, which places little emphasis on outcomes by attempting to assess value for money in relation to pupil/teacher ratios, cost per pupil, occupancy ratios, participation rates, etc., is being replaced by a more sophisticated analysis of process as well as product, the nature of teaching, the quality of learning, the suitability of materials.

The curriculum: definitions, control and administration

5. Whatever the prevailing debates, many of the issues raised above revolve around the curriculum. The school curriculum is at the heart of the educational process. It is the manifest instrument by which schools define their central function and set forth their values, their general aims and goals, and their specific objectives. The curriculum and student performance in that curriculum are the means by which the effectiveness and results of schooling commonly are judged. Through the curriculum, the schools mediate between the learning needs of the individual pupils, the changing realities of society and the rapid evolution of knowledge itself. Traditionally, the curriculum is the means by which the core values of a society in the setting of the school are selected, addressed, mediated in a living situation where teachers, students, parents and the community interact.

6. The word "curriculum", however, is interpreted differently in many OECD countries. In some, the curriculum is broadly interpreted, to include all the experiences for which the school is responsible, making the term almost coextensive with schooling. This all-embracing view of the curriculum is closely connected with an educational tradition which attaches importance to the school as a community and to its moral and social role in society. "Instruction" in school "subjects" is therefore only part of the school curriculum. This contrasts with the tradition in other countries which see "instruction" as the major purpose of the school leaving other aspects of "education" to family, church and community at large. There are even differences between the way countries interpret the concept of "instruction" – some prefering a more encyclopaedic approach, others being concerned with the teaching of essential concepts. Despite such differences, "instruction" and "education" interrelate in important ways both within the school and between the school, the home and the community. These relationships often provide insights into society's expectations of the school, especially in the matter of social behaviour and moral standards. There are thus important social and – in the broad sense – political dimensions to the curriculum. There has been some dilution of the overall control of educationalists in defining the curriculum with an increased recognition that the imparting of knowledge is not the exclusive preserve of the school.

7. But what is of central importance is how effective the curriculum is in improving student performance. Therefore, for the purposes of this study, curriculum may be regarded as all *planned learning experiences* which take place in the school and which contribute to successful student learnings. Curriculum refers to the context, structure and processes of teaching and learning which the school organises in pursuit of its educational objectives and values. With regard to the control of the curriculum, this varies in many countries from being nationally-prescribed, locally-determined or school-based.

- *In the light of the above, country respondents are invited to:*
  a) *Provide basic information on the structure, organisation and control of their education systems (pre-school to end of secondary);*
  b) *Indicate trends in student enrolment, participation and retention rates and staff/student ratios;*

c) *Provide data from research and other sources to demonstrate ways in which changes in the* practice *of education at the school level really are occurring, in accordance with policy and legislative directives and public opinion;*

d) *Comment on the situation in their respective countries with regard to each of the main points raised in paragraphs 1-7, giving concrete examples where possible.*

TRENDS IN CURRICULUM REFORM

8. In order to facilitate the work to be carried out in Member countries in their responses to the questions posed below, a division is drawn between elementary and secondary education – the former beginning around five years of age and the latter ending around sixteen years of age. It is recognised that in some countries there is a continuum from early childhood to completion of full secondary education at 17 or 18. In others, significant breaks occur between the ages of 14 and 16 resulting in specific vocational programmes for some students.

Elementary education

The general debate

9. The terminal function of the elementary school has virtually disappeared with the extension of the system of compulsory schooling and achievement in all Member countries of either universal or large-scale secondary education. Elementary education is seen in some countries as part of a continuous, common school, in others it retains very distinctive characteristics. Debate about curricula, teaching and learning in Member countries revolves around a number of poles: subject- or child-based teaching; large-group or individualised teaching; common needs or those of subcultures and special groups; integrated or separate subjects, formal/didactic or informal/flexible classroom organisation and teaching; school-based or centralised curriculum decision-making; system-wide assessment of formal learning outcomes or processes of learning, within the school; and the values that should inform school life. In some Member countries, new subjects or subject areas and new groupings of subject matter are being introduced. There seems to be widespread interest in redefining the basic or foundational studies. A continuing problem at this stage of education is to determine when and how schools create learning environments with mixed age and ability groupings and how they relate to situations where a more formalised approach is applied.

– *Please elaborate on:*

a) *The nature of the debate about elementary education in your country;*

b) *The relationship between pre-school and elementary education;*

c) *How is the transition from elementary to secondary education planned and monitored?*

d) *How are the qualities and skills of teachers being attuned to new curriculum requirements?*

e) *What major changes have been made or are planned in the curriculum methods of teaching and learning procedures in elementary education, and what is the rationale for those changes?*

f) *By whom are such changes made – which have been supported and which have been subject to criticism, by whom and on what grounds?*

Curriculum content and the organisation of teaching and learning

10. In the debate about the *content* of elementary education, it would seem that some countries place more weight on some parts of the curriculum than others. In many countries, for example, there is intensive discussion about what is fundamental in the education of children in this age range.

- *Please comment on the dimensions of this discussion in your country, if possible with reference to research data and other analyses of what is actually happening in schools.*

11. As well as the debate about fundamentals, in several countries new subjects or subject areas, new themes and groupings of subject matter, are being included in the curriculum, e.g. science and technology, IT (computers, video, film, TV, etc.), environmental problems, values, and combinations of science and social science, etc.

- *Indicate what new or additional components are being introduced into the elementary curriculum in your country.*

12. There has been much discussion during the last decade about the school providing for all children, especially in the light of widespread legislation in favour of the integration of children with special education needs. There has also been concern about the use of curriculum materials and practices which perpetuate ethnic and gender stereotypes.

- *Comment on how concern with the integration of the disabled has affected the curriculum in elementary education in your country. Has there been equal concern for the gifted? Has concern about the issue of the education of ethnic groups or women affected components of the curriculum and approaches to teaching and learning?*

13. The organisation of the school day in terms of the length and of the time devoted to each learning component has been the subject of some investigation in a few Member countries.

- *Have such changes occurred in your country and, if so, how have they affected the curriculum?*

14. There is also the question of whether elementary pupils are taught (in the main) by a single teacher or by *several* teachers – the former has problems of range (can the teacher be competent in everything?) and the latter has problems of coherence.

- *Please comment on the basic principles and priorities governing the organisation of teaching in your country.*

Assessment and evaluation

15. The gateway selective examination at the end of elementary education is dying out in many OECD countries. Much more sophisticated methods of assessment are being introduced to monitor and record a child's development. There is a growing interest in defining performance indicators and concern, in some cases, at the effects of "over-testing" on the curriculum and learning. Alongside this interest in new approaches to student assessment is a determination to strengthen evaluation of curriculum planning and provision.

- *Please comment on what new methods of pupil assessment are being introduced in your country and how they are affecting the curriculum and students' learning;*
- *What evidence is there of growing interest in evaluation of the curriculum including ways of planning and delivering the curriculum?*

Secondary education

Curriculum content and the organisation of teaching and learning

16. At the secondary stage, much learning still seems to be fragmented and lacking in relevance or interest to students. In some countries, there is a lack of rigour in teaching and learning styles and a reluctance to introduce new content. Other critics draw attention to problems in student motivation

and the relevance and interest of school programmes. Many of the reforms proposed in the 1960s and 1970s – team teaching, mixed-group learning, individualised learning, interdisciplinarity – do not seem to have taken hold with any great degree of general success. The curriculum is still organised for the most part around *specific subjects*. Alternative ways of *organising the curriculum* are not new but it would be important to examine some of the latest approaches in a few Member countries.

17. A great deal of the debate at this stage is centred on the *content* of the curriculum and its *organisation* into required and optional subjects or subject areas. Much discussion revolves around the concept of a "core" curriculum, sometimes defined simply as whatever subjects or elements of subject matter are compulsory for all students within a school or required across a whole education system; sometimes as a set of basic and fundamental (foundation) studies or areas of experience, within a hierarchical model of the curriculum; or sometimes as a unifying theme or themes which give coherence and unity to the whole curriculum. Although there is not a consensus about how the core should be defined or, once defined, what it should include, many would agree that mother tongue, foreign language, mathematics, science and technology, arts (aesthetic and creative) and humanities, contain the basic essentials of any core curriculum. There is also widespread agreement about the need to include practical studies, physical education and moral and spiritual values within the core. Such a broad approach raises questions about the distinction between the "core" and the "whole" curriculum.

18. On the other hand, in practice there can be an excessively narrow core, for example, within the early years of secondary education where an overconcentration on the basics can lead to its own problems. As the British report "Better Schools" has pointed out, although primarily in the context of elementary education, it is a mistake to believe "that a concentration on basic skills is by itself enough to improve achievement in literacy and numeracy. Many children are still given too little opportunity for work in scientific, practical, and aesthetic areas of the curriculum which increases not only their understanding within those areas but also their literacy and numeracy. In a majority of schools, overconcentration on the practice of basic skills in literacy and numeracy unrelated to a context in which they are needed means that those skills are insufficiently extended and applied". Definitions of literacy and numeracy are therefore expanding to refer to a broad set of competences for personal and social life.

- *Please comment on what content is regarded as compulsory throughout the secondary stage; what content is optional and at what age, and the reasons for these policies and decisions;*
- *How are these compulsory subjects or subject areas structured in relation to expectations about performance and standards, e.g. minimum competences and expectations;*
- *Is there a move towards, or away from, a kind of cafeteria approach where students freely choose and combine subjects drawn from a very wide range of options?*

19. The question of secondary curriculum balance is also being influenced by: *i*) increasing participation in post-secondary education, *ii*) the importance of lifelong education, *iii*) education for leisure and citizenship.

- *Please comment on whether any of the above have consequences for the type of curriculum on offer;*
- *If "balance" in the curriculum is a matter of concern, how is it being addressed?*

Vocational preparation

20. In some education systems, vocational or prevocational preparation play a very important part in the curriculum of secondary schools and have been significantly extended. In others, vocational considerations are very largely deferred to the post-secondary phase. There are differences about when vocational specialisation should begin, about the balance between vocational and academic education, and about the nature and importance of specific prevocational programmes. In some countries there is a danger that some pupils are directed at an early age towards vocational programmes and away from academic programmes creating a kind of in-school selection mechanism which can in fact diminish the importance of vocational preparation.

21. Further, it is becoming more and more obvious that improved integration into the social and economic mainstream requires not just the acquisition of specific and general vocational skills, but also the enhancement of those personal skills and attributes which enable young people to find and move smoothly between jobs and to be creative, flexible and enterprising in work and outside it. Such skills have come to be called "enterprise skills".

- *What role does vocational education play in secondary education in your country? At what age is it introduced and how is it defined?*
- *What kinds of specific prevocational programmes are being introduced and why?*
- *What problems exist in the balance between vocational and academic education?*
- *What problems exist in changing the content of vocational education itself to respond to the changing nature of the labour market? What importance is being placed on fostering "enterprise skills" throughout the curriculum?*

Special groups

22. The school provides for children of varying abilities and aptitudes which necessitates a differentiated curriculum. Furthermore, the existence of ethnic minorities in secondary education poses a whole new set of issues, especially where the curriculum becomes more and more specialised, e.g. in science and mathematics (who teaches and in what language?). The issue of multiculturalism throughout the curriculum is evident and can have a profound effect on pupil/pupil and pupil/teacher relationships.

- *Please comment on what changes have resulted from the growth of ethnic minorities in your country; how have they affected the curriculum and in what precise ways are their needs being addressed?*

Concern has been expressed in some countries about declining enrolments of young women in mathematics and science courses and also about the broader issue of how changes in our understanding of women's roles should be represented in other subjects across the curriculum.

- *Do these concerns exist in your country and, if so, have any amendments been made to the curriculum to encompass them?*

Assessment and evaluation

23. It is maintained by some that more emphasis is being placed on the processes of learning (concepts, skills, etc.) and less on the product or outcomes based on *content* (knowledge). Narrow measures of learning outcomes are being replaced by detailed records of performance, pupil profiles, ongoing assessment, etc. In addition to (or sometimes in place of) the traditional summative assessment of student performance at the end of secondary schooling, emphasis is being placed on formative or diagnostic assessments of student progress within the school, and on system-wide measures or indicators taking into account a total age group and overall levels and rates of learning. Social demands, on the one hand for higher standards of learning outcomes in rapidly changing economies, and on the other hand for equity, seem to be driving these changes. Professional responses are of an increasingly sophisticated kind:

- *Please indicate whether new methods of pupil assessment are being developed in your country and how they are having an effect on compulsory schooling and the curriculum?*
- *Is there a stronger emphasis among educators in your country on process? Is there a tension between this and the need for greater accountability and monitoring of outcomes? What are the developments in monitoring the quality of schooling, e.g., performance indicators, quality of courses, conditions of teaching, etc.*
- *Have any changes in post-secondary education and training affected school-level assessment policies and procedures?*
- *Are there significant changes in certification or accreditation?*

Curriculum development

24. All the above is linked to curriculum development. There is some evidence that a new wave of curriculum development is beginning in a few Member countries. Because of financial restraints, it is unlikely to reach the levels of the 1960s and 1970s, but new initiatives by the National Science Foundation in the United States are of great interest as well as the new partnerships which are developing in Member countries, e.g., with industry and commerce (e.g., "Adopt a School" movement in the United States). Current development is taking place at national, local and school levels, sometimes involving higher education research institutions, industry and commerce. Unlike much of the development of the 1950s and 1960s, elements of the new wave of curriculum development seem to be taking into account broad and comprehensive educational policy objectives and whole curriculum frameworks, and they are directly influenced by expressed parent and community concerns. In several countries, for example the Netherlands, the United Kingdom and Japan, there is a very strong central drive; in others such as Germany, there seems to be more sporadic activity or a concentration on development within a limited range of subjects. In the United States, for example, curriculum development incorporates a strong emphasis on well-defined social goals and values. Curriculum development in several countries is significantly influenced by comparative data including international comparisons of student performance. These changes have implications for the direction and nature of school-based curriculum development as well as for development at the national level.

- *At what level in the system is the detail in the curriculum prescribed and who prescribes changes? Is school-based curriculum development an important element in curriculum planning?*
- *Who is developing the curriculum? In what ways and for what reasons? How is it evaluated?*
- *Who is being funded (teachers, administrators, education researchers)? To do what?*
- *What areas are receiving priority (e.g., science, drugs, education)?*
- *Which areas are being neglected, e.g., the arts (music, drama, aesthetics, etc.)?*
- *Who decides on the "new" knowledge in the curriculum? Who updates it?*
- *How do teachers become aware of new curriculum content and ways of teaching it? How is it generally disseminated?*
- *How far and in what ways are financial and other constraints affecting the ability of schools and systems to respond to the challenge to develop new curricula and pedagogy?*

Annex 2

RESPONSES TO STATE-OF-THE-ART QUESTIONNAIRE

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